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PROCEEDINGS

OF THE

ASIATIC SOCIETY OF BENGAL.

EDITED BY

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JANUARY TO DECEMBER,
1902.

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LIST OF MEMBERS
OF THE
ASIATIC SOCIETY OF BENGAL.
ON THE 31ST DECEMBER, 1901.

LIST OF OFFICERS AND MEMBERS OF COUNCIL
OF THE ASIATIC SOCIETY OF BENGAL
FOR THE YEAR 1901.

President :

His Honor Sir John Woodburn, M.A., K.C.S.I.

Vice-Presidents :

H. H. Risley, Esq., B.A., C.I.E., I.C.S.

Colonel T. H. Hendley, C.I.E., I.M.S.

Major A. Alcock, M.B., C.M.Z.S., I.M.S.

Secretary and Treasurer.

Honorary General Secretary: T. H. Holland, Esq.,
F.G.S., A.R.C.S., succeeded by Major A. Alcock, I.M.S.

Treasurer: W. K. Dods, Esq.

Additional Secretaries.

Philological Secretary: T. Bloch, Esq., Ph.D.

Natural History Secretary: L. de Nicéville, Esq., F.E.S.,
C.M.Z.S.

Anthropological Secretary: F. E. Pargiter, Esq., B.A.,
I.C.S.

Joint Philological Secretary: Mahāmāhopādhyāya Hara-
prasād Shastri, M.A.

Other Members of Council.

J. D. Nimmo, Esq.

Dr. Mahendralal Sircar, M.D., D.L., C.I.E.

C. L. Griesbach, Esq., F.G.S., C.I.E.

A. Pedler, Esq., F.R.S.

S. C. Hill, Esq., B.A., B.Sc.

J. Bathgate, Esq.

F. Finn, Esq., B.A., F.Z.S.

The Hon. Mr. C. W. Bolton, C.S.I., I.C.S.

T. H. D. La Touche, Esq., B.A.

LIST OF ORDINARY MEMBERS.

R. = Resident. N. R. = Non-Resident. A. = Absent. N. S. = Non-Subscribing.
L. M. = Life Member. F. M. = Foreign Member.

N. B.—Members who have changed their residence since the list was drawn up are requested to give intimation of such a change to the Honorary General Secretary, in order that the necessary alteration may be made in the subsequent edition. Errors or omissions in the following list should also be communicated to the Honorary General Secretary.

Members who are about to leave India and do not intend to return are particularly requested to notify to the Honorary General Secretary whether it is their desire to continue Members of the Society; otherwise, in accordance with Rule 40 of the Rules, their names will be removed from the list at the expiration of three years from the time of their leaving India.

Date of Election.		
1901 June 5.	R.	Abdu Rahman, A. F. M., Barrister-at-Law. <i>Calcutta.</i>
1894 Sept. 27.	N.R.	Abdul Wali, Maulvie. <i>Dinajpur.</i>
1895 May 1.	N.R.	Abdus Salam, Maulvie, M.A. <i>Cuttack.</i>
1888 Feb. 1.	F.M.	Adamson, Lieut.-Col. Charles Henry Ellison, M.S.C. <i>Europe.</i>
1901 Aug. 7.	N.R.	Adams, Margaret. Baptist Zenana Mission. <i>Delhi.</i>
1888 April 4.	R.	Ahmud, Shams-ul-ulama Maulvie, Arabic Professor, Presidency College. <i>Calcutta.</i>
1888 Feb. 1.	R.	Alcock, Major Alfred William, M.B., LL.D., F.R.S., Superintendent, Indian Museum. <i>Calcutta.</i>
1885 Mar. 4.	L.M.	Ali Bilgrami, Sayid, B.A., A.R.S.M., F.G.S. <i>Hyderabad.</i>
1899 Jan. 4.	N.R.	Ali Hussain Khan, Nawab. <i>Bopal.</i>
1900 Aug. 1.	R.	Allen, C. G. H., I.C.S. <i>Calcutta.</i>
1874 June 3.	R.	Ameer Ali, The Hon'ble Mr. Justice, M.A., C.I.E., Barrister-at-Law, Judge, High Court. <i>Calcutta.</i>
1893 Aug. 31.	N.R.	Anderson, Major A. R. S., B.A., M.B., I.M.S. <i>Port Blair.</i>
1884 Sept. 3.	R.	Anderson, J. A. <i>Calcutta.</i>
1890 July 2.	N.R.	Arnold, Thomas Walker, B.A., M.B.A.S. <i>Lahore.</i>
1870 Feb. 2.	L.M.	Baden-Powell, Baden Henry, M.A., C.I.E. <i>Europe.</i>
1901 Jan. 2.	R.	Badshah, K. J., B.A., I.C.S. <i>Calcutta.</i>
1898 Nov. 2.	N.R.	Bailey, The Revd. Thomas Grahame, M.A., B.D. <i>Wazirabad.</i>
1891 Mar. 4.	N.R.	Baillie, D. C., I.C.S. <i>Ghazipur.</i>

Date of Election.		
1898 Aug. 3.	N.R.	Bain, Lieut.-Col., D. S. E., I.M.S. <i>Mercara.</i>
1891 April 1.	N.R.	Baker, Edward Charles Stuart. <i>Debrugarh.</i>
1900 Aug. 29.	A.	Baker, The Hon. Mr. E. N., C.S.I., I.C.S. <i>Europe.</i>
1889 May 1.	R.	Banerji, The Hon. Mr. Justice Guru Das, M.A., D.L., Judge, High Court. <i>Calcutta.</i>
1896 Mar. 4.	N.R.	Banerji, Satish Chandra, M.A. <i>Allahabad.</i>
1869 Dec. 1.	L.M.	Barker, R. A., M.D. <i>Europe.</i>
1885 Nov. 4.	R.	Barman, Damodar Das. <i>Calcutta.</i>
1877 Jan. 17.	N.R.	Barman, H. H. The Maharaja Radha Kishor Dev. <i>Tipperah.</i>
1898 Mar. 2.	N.R.	Barnes, Herbert Charles, I.C.S. <i>Shillong.</i>
1894 Sept. 27.	R.	Basu, Nagendra Natha. <i>Calcutta.</i>
1898 May 4.	R.	Bathgate, J. <i>Calcutta.</i>
1895 July 3.	L.M.	Beatson-Bell, Nicholas Dodd, B.A., I.C.S. <i>Europe.</i>
1876 Nov. 15.	F.M.	Beveridge, Henry, I.C.S., (retired). <i>Europe.</i>
1900 April 4.	N.R.	Bingley, Captain A. H., I.S.C. <i>Simla.</i>
1898 Nov. 2.	N.R.	Black, Robert Greenhill. <i>Jalpaiguri.</i>
1859 Aug. 3.	L.M.	Blanford, William Thomas, LL.D., A.R.S.M., F.G.S., F.R.G.S., F.Z.S., F.R.S. <i>Europe.</i>
1897 Feb. 3.	N.R.	Bloch, Theodor, PH.D. <i>Gya.</i>
1893 Feb. 1.	N.R.	Bodding, The Revd. P. O. <i>Rampore Haut.</i>
1885 Mar. 4.	R.	Bolton, The Hon. Mr. Charles Walter, C.S.I., I.C.S. <i>Calcutta.</i>
1895 July 3.	N.R.	Bouham-Carter, Norman, I.C.S. <i>Mymensingh.</i>
1890 July 2.	R.	Bonnerjee, Womes Chunder, Barrister-at-Law, Middle Temple. <i>Calcutta.</i>
1897 June 2.	N.R.	Bose, Annada Prasad, M.A. <i>Rajshahi</i>
1895 Mar. 6.	A.	Bose, Jagadis Chandra, M.A., D.Sc., Bengal Education Service. <i>Europe.</i>
1880 Nov. 3.	N.R.	Bose, Pramatha Nath, B.Sc., F.G.S. Geological Survey of India. <i>Camp Raipur, C.I.</i>
1900 Jan. 19.	R.	Bose, Rai Chuni Lal, Bahadur, M.B., F.C.S. <i>Calcutta.</i>
1895 April 3.	R.	Bourdillon, The Hon. Mr. James Austin, C.S.I., I.C.S. <i>Calcutta.</i>
1860 Mar. 7.	L.M.	Brandis, Sir Dietrich, K.C.I.E., PH.D., F.L.S., F.R.S. <i>Europe.</i>
1900 Aug. 1.	R.	Brown, Major E. Harold, M.D., I.M.S. <i>Calcutta.</i>
1901 Sept. 25.	R.	Buchanan, Major W. J., I.M.S. <i>Calcutta.</i>
1887 May 4.	R.	Bural, Nobin Chand, Solicitor. <i>Calcutta.</i>
1801 June 5.	R.	Burkill, I. H. <i>Calcutta.</i>
1896 Jan. 8.	N.R.	Burn, Richard, I.C.S. <i>Allahabad.</i>
1900 May 2.	N.R.	Butcher, Flora, M.D. <i>Pahwal.</i>
1898 Sept. 30.	R.	Cable, Ernest. <i>Calcutta.</i>
1896 Jan. 8.	R.	Caddy, Dr. Arnold. <i>Calcutta.</i>
1901 Jan. 2.	R.	Campbell, Duncan. <i>Calcutta.</i>
1901 Mar. 6.	N.R.	Campbell, W. E. N., I.C.S. <i>Mirzapur, N.-W. P.</i>
1895 July 3.	N.R.	Carey, Hirzel Denis de Mussenden, I.C.S. <i>Burdwan.</i>
1895 July 3.	N.R.	Carlyle, Robert Warrand, C.I.E., I.C.S. <i>Balasore.</i>

Date of Election.		
1890 June 4.	N.R.	Chakravarti, Man Mohan, M.A., B.L., Deputy Magistrate. <i>Midnapur.</i>
1901 Mar. 6.	N.R.	Chakravarti, Manmatha Nath. <i>Tamluk, Midnapur.</i>
1901 June 5.	R.	Chapman, E. P., I.C.S. <i>Calcutta.</i>
1898 Nov. 2.	R.	Chatterjea, Kishori Mohan, Judge, Court of Small Causes. <i>Calcutta.</i>
1894 Aug. 1.	N.R.	Chatterjee, M. N. <i>Patiala.</i>
1893 Sept. 28.	N.R.	Chaudhuri, Banawari Lala, B.Sc., Edin. <i>Mymensingh.</i>
1899 Jan. 4.	A.	Clemow, Dr. Frank Gerard, M.D., Edin. D.P.H., Camb. <i>Europe.</i>
1880 Aug. 26.	F.M.	Clerk, Major-Genl. Malcolm G. <i>Europe.</i>
1881 May 4.	N.R.	Cockburn, John, Opium Department. <i>Cawnpore.</i>
1889 Nov. 6.	R.	Colville, William Brown. <i>Calcutta.</i>
1890 Dec. 3.	A.	Connan, William, C.E. <i>Europe.</i>
1898 June 1.	N.R.	Cordier, Dr. Palmyr. <i>Pondicherry.</i>
1876 Mar. 1.	F.M.	Crawford, James, B.A., I.C.S. <i>Europe.</i>
1901 June 5.	R.	Crawford, Major D. G., I.M.S. <i>Hughli.</i>
1887 Aug. 25.	R.	Criper, William Risdon, F.C.S., F.I.C., A.R.S.M. <i>Calcutta.</i>
1877 June 6.	A.	Croft, Sir Alfred W., M.A., K.C.I.E. <i>Europe.</i>
1895 July 3.	N.R.	Cumming, John Ghest, I.C.S. <i>Patna.</i>
1898 Aug. 26.	N.R.	Cuppige, Captain W. A., I.S.C. <i>Dibrugarh.</i>
1873 Dec. 3.	F.M.	Dames, Mansel Longworth, I.C.S. <i>Europe.</i>
1896 Mar. 4.	R.	Das-Gupta, Jogendra Nath, B.A., Barrister-at-Law. <i>Calcutta.</i>
1901 Aug. 28.	N.R.	Das, Govinda. <i>Benares.</i>
1865 June 7.	N.R.	Das, Raja Jay Krishna, Bahadur, C.S.I. <i>Moradabad.</i>
1879 April 7.	N.R.	Das, Ram Saran, M.A., Secy., Oudh Commercial Bank, Limited. <i>Fyzabad, Oudh.</i>
1900 July 4.	N.R.	Das, Syam Sunder, B.A. <i>Benares.</i>
1896 Dec. 2.	A.	Davis, Arthur William, I.C.S. <i>Europe.</i>
1895 Sept. 19.	N.R.	De, Kiran Chandra, B.A., I.C.S. <i>Faridpur.</i>
1895 Dec. 4.	N.R.	Delmerick, Charles Swift. <i>Budaon.</i>
1893 Mar. 1.	A.	Deussen, Dr. Paul. <i>Europe.</i>
1900 May 2.	N.R.	Dev, Kumar Satindra, Rai Mahesaya. <i>Bansberia.</i>
1899 Aug. 30.	N.R.	Dev, Raj Kumar Satchidanand, Bahadur. <i>Deogarh, Sambalpur.</i>
1896 Jan. 8.	N.R.	Dewhurst, R. Paget, I.C.S. <i>Unao.</i>
1901 June 5.	N.R.	Dey, Nundolal. <i>Tamluk, Midnapur.</i>
1898 Jan. 5.	R.	Dods, W. K. <i>Calcutta.</i>
1886 June 2.	R.	Doyle, Patrick, C.E., [F.R.A.S., F.R.S.E., F.G.S. <i>Calcutta.</i>
1901 Feb. 6.	N.R.	Drake-Brockman, Major H. E., I.M.S. <i>Bombay.</i>
1892 Sept. 22.	A.	Drury, Major Francis James, M.B., I.M.S. <i>Europe.</i>
1889 Jan. 2.	N.R.	Dudgeon, Gerald Cecil, Holta Tea Co., Ltd., <i>Palam-pur.</i>
1879 Feb. 5.	N.R.	Duthie, J. F., B.A., P.L.S. <i>Saharanpur.</i>
1892 Jan. 6.	N.R.	Dutt, Gerindra Nath. <i>Hatua.</i>

Date of Election.		
1877 Aug. 30.	R.	Dutt, Kedar Nath. <i>Calcutta.</i>
1892 Aug. 25.	R.	Dutt, Rai Narsingh Chunder, Bahadur. <i>Howrah.</i>
1900 April 4.	R.	Dyson, Major Herbert Jekyl, F.R.C.S., I.M.S. <i>Calcutta.</i>
1900 July 4.	R.	Earle, A., I.C.S. <i>Calcutta.</i>
1901 June 5.	N.R.	Ede, Francis Joseph, C. E., A.M.I.C.E., F.G.S. <i>Silchar Oachar.</i>
1871 Dec. 2.	N.R.	Eliot, John, M.A., C.I.E., F.R.S. <i>Simla.</i>
1900 April 4.	A.	Evans, The Hon. Sir Griffith, K.C.I.E. <i>Europe.</i>
1900 Mar. 7.	R.	Fanshawe, Arthur Upton, C.S.I., I.C.S. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Fanshawe, The Hon. Mr. H. C., C.S.I., I.C.S. <i>Delhi.</i>
1901 Mar. 6.	N.R.	Fergusson, J. C. <i>Hardoi, Oudh.</i>
1899 Jan. 4.	A.	Ferrar, Lieutenant, M. LL., I.S.C. <i>Europe.</i>
1894 Dec. 5.	R.	Finns, Frank, B.A., F.Z.S., Deputy Superintendent, Indian Museum. <i>Calcutta.</i>
1898 Sept. 30.	R.	Firminger, The Revd. Walter K., M.A. <i>Calcutta.</i>
1892 May 4.	A.	Forrest, G. W., B.A. <i>Europe.</i>
1900 Dec. 5.	N.R.	Gabriel, E. V., I.C.S. <i>Begu Serai.</i>
1893 Jan. 11.	R.	Gait, Edward Albert, I.C.S. <i>Calcutta.</i>
1899 Aug. 30.	R.	Garth, Dr. H. C. <i>Calcutta.</i>
1859 Aug. 3.	L.M.	Gastrell, General James Eardley. <i>Europe.</i>
1889 Jan. 2.	R.	Ghose, Jogendra Chandra, M.A., B.L. <i>Calcutta.</i>
1889 Mar. 6.	R.	Ghosh, Bhupendra Sri, B.A., B.L. <i>Calcutta.</i>
1869 Feb. 3.	R.	Ghosh, Pratapa Chandra, B.A. <i>Calcutta.</i>
1897 Dec. 6.	A.	Godfrey, Captain Stuart, I.S.C. <i>Europe.</i>
1861 Feb. 5.	N.S.	Godwin-Austen, Lieut.-Colonel H. H., F.R.S., F.Z.S., F.R.G.S. <i>Europe.</i>
1899 Aug. 2.	R.	Goenka, Roormall. <i>Calcutta.</i>
1896 Nov. 4.	A.	Grant, A. J., I.C.S. <i>Europe.</i>
1897 July 7.	N.R.	Grant, Captain J. W., I.M.S. <i>Sirohee.</i>
1898 Aug. 3.	R.	Green, Major Charles Robert Mortimer, F.R.C.S. I.M.S. <i>Calcutta.</i>
1876 Nov. 15.	F.M.	Grierson, George Abraham, PH.D., C.I.E., I.C.S. <i>Europe.</i>
1885 Dec. 2.	R.	Griesbach, C. L., C.I.E., F.G.S., Director, Geological Survey of India. <i>Calcutta.</i>
1900 Dec. 5.	L.M.	Grieve, J. W. A. <i>Kalimpong.</i>
1901 April 3.	N.R.	Guha, Abhaya Sankara. <i>Shillong.</i>
1898 June 1.	N.R.	Gupta, Bepin Behari. <i>Chota Nagpur.</i>
1898 April 6.	N.R.	Gupta, Krishna Govinda, I.C.S., Barrister-at-Law. <i>Cuttack.</i>
1898 Jan. 5.	N.R.	Gurdon, Captain P. R. T., I.S.C. <i>Gauhati.</i>
1901 Mar. 6.	N.R.	Habibur Rahman Khan, Moulvie. <i>Bhikampur.</i>
1892 Jan. 6.	N.R.	Haig, Captain Wolseley, I.S.C. <i>Berar.</i>
1899 April 5.	N.R.	Hare, Major E. C., I.M.S. <i>Gauhati.</i>
1901 Jan. 2.	R.	Harris, Lieut.-Col. G. F. A., I.M.S. <i>Calcutta.</i>

Date of Election.		
1884 Mar. 5.	L.M.	Hassan Ali Qadr, Sir Synd, Nawab Bahadur, K.C.I.E. <i>Murshedabad.</i>
1897 Feb. 3.	R.	Hayden, H. H., B.A., B.E., F.G.S., Geological Survey of India. <i>Calcutta.</i>
1875 Mar. 3.	R.	Hendley, Col. Thomas Holbein, C.I.E., I.M.S., Inspector General of Civil Hospitals, Bengal. <i>Calcutta.</i>
1892 Aug. 3.	R.	Hill, Samuel Charles, B.A., B.Sc. <i>Calcutta.</i>
1872 Dec. 5.	A.	Hoernle, Augustus Frederick Rudolf, PH.D., C.I.E. <i>Europe.</i>
1878 Mar. 6.	A.	Hoey, W., PH.D., I.C.S., (retired). <i>Europe.</i>
1891 July 1.	A.	Holland, Thomas Henry, F.G.S., A.R.C.S., Geological Survey of India. <i>Europe.</i>
1898 Feb. 2.	R.	Hooper, David, F.C.S. <i>Calcutta.</i>
1884 Mar. 5.	A.	Hooper, The Hon. Mr. John, B.A., I.C.S. <i>Europe.</i>
1901 Dec. 4.	R.	Hossack, Dr. W. C. <i>Calcutta.</i>
1873 Jan. 2.	L.M.	Houstoun, G. L., F.G.S. <i>Europe.</i>
1890 Dec. 3.	A.	Hyde, The Revd. Henry Barry, M.A. <i>Europe.</i>
1866 Mar. 7.	F.M.	Irvine, William, I.C.S., (retired). <i>Europe.</i>
1899 April 5.	A.	Kempthorne, H. E. <i>Europe.</i>
1882 Mar. 1.	N.R.	Kennedy, Pringle, M.A. <i>Mozufferpur.</i>
1867 Dec. 4.	A.	King, Sir George, M.B., K.C.I.E., LL.D., F.L.S., F.R.S., I.M.S., (retired). <i>Europe.</i>
1881 Mar. 2.	N.R.	King, Lucas White, B.A., LL.B., C.S.I., I.C.S. <i>Dharamsala.</i>
1896 Aug. 27.	A.	Konstam, Edwin Max, I.C.S. <i>Europe.</i>
1896 July 1.	R.	Küchler, George William, M.A. <i>Calcutta.</i>
1891 Feb. 4.	N.R.	Kupper, Raja Lala Bunbehari. <i>Burdwan.</i>
1899 Aug. 30.	N.R.	Lal, Dr. Mannu. <i>Banda.</i>
1887 May 4.	L.M.	Lanman, Charles R. <i>Europe.</i>
1889 Mar. 6.	N.R.	LaTouche, Thomas Henry Digges, B.A., Geological Survey of India. <i>Mandalay.</i>
1900 Sep. 19.	R.	Law, The Hon. Sir Edward F. G., K.C.M.G. <i>Calcutta.</i>
1889 Nov. 6.	R.	Lee, W. A., F.R.M.S. <i>Calcutta.</i>
1900 May 2.	R.	Leistikow, F. R. <i>Calcutta.</i>
1889 Feb. 6.	R.	Little, Charles, M.A., Bengal Education Service. <i>Calcutta.</i>
1899 Dec. 6.	N.R.	Lorimer, J. G., I.C.S. <i>Malakhand.</i>
1869 July 7.	F.M.	Lyall, Sir Charles James, M.A., K.C.S.I., C.I.E., LL.D., I.C.S., (retired). <i>Europe.</i>
1870 April 7.	L.M.	Lyman, B. Smith. <i>Europe.</i>
1896 Mar. 4.	N.R.	MacBlaine, Frederick, I.C.S. <i>Purneah.</i>
1901 Aug. 7.	R.	Macfarlane, J., Librarian, Imperial Library. <i>Calcutta.</i>
1893 Jan. 11.	L.M.	MacLagan, E. D., M.A., I.C.S. <i>Multan.</i>

Date of Election.		
1891 Feb. 4.	R.	Macpherson, Duncan James, M.A., C.I.E., I.C.S. <i>Calcutta.</i>
1896 Feb. 5.	A.	Macpherson, William Charles, I.C.S. <i>Europe.</i>
1893 Aug. 31.	N.R.	Mahatha, Purnmeshwar Narain. <i>Mozufferpur.</i>
1895 Aug. 29.	R.	Mahomed Gilani, Shams-ul-Ulama Shaikh. <i>Calcutta.</i>
1898 Nov. 2.	N.R.	Maitra, Akshaya Kumar, B.A., B.L. <i>Rajshahi.</i>
1889 Jan. 2.	R.	Maliah, Kumar Ramessur. <i>Howrah.</i>
1893 July 5.	A.	Mangos, C. D. <i>Europe.</i>
1901 June 5.	R.	Mann, H. H., B.Sc. <i>Calcutta.</i>
1889 Mar. 6.	A.	Mann, John, M.A. <i>Europe.</i>
1893 Mar. 1.	N.R.	Marriott, Charles Richardson, I.C.S. <i>Monghyr.</i>
1892 April 6.	N.R.	Maynard, Major F. P., I.M.S. <i>Bankipur.</i>
1900 May 2.	R.	McArdle, Captain Andrew Augustine Frayne, B.A., M.B., I.M.S. <i>Calcutta.</i>
1901 Aug. 28.	R.	McLeod, Norman. <i>Calcutta.</i>
1899 Feb. 1.	N.R.	McMahon, Captain A. H., C.S.I., C.I.E., I.S.C. <i>Quetta.</i>
1899 Mar. 1.	N.R.	McMinn, C. W., B.A., I.C.S., (retired). <i>Comilla.</i>
1886 Mar. 3.	L.M.	Mehra, Rustomjee Dhunjeebhoj, C.I.E. <i>Calcutta.</i>
1895 July 3.	F.M.	Melitus, Paul Gregory, C.I.E., I.C.S. <i>Europe.</i>
1900 Mar. 7.	A.	Meyer, William Stevenson, I.C.S. <i>Europe.</i>
1900 Jan. 19.	A.	Michie, Charles. <i>Europe.</i>
1884 Nov. 5.	R.	Middlemiss, C. S., B.A., Geological Survey of India. <i>Calcutta.</i>
1884 Sept. 3.	R.	Miles, William Harry. <i>Calcutta.</i>
1870 July 6.	R.	Miller, Albert Bermingham, B.A., Barrister-at-Law, Official Trustee. <i>Calcutta.</i>
1898 April 6.	R.	Milne, Captain C. J., I.M.S. <i>Calcutta.</i>
1874 May 6.	F.M.	Minchin, F. J. V. <i>Europe.</i>
1896 July 1.	N.R.	Misra, Rai Lakshmi Sanker, Bahadur. <i>Benares.</i>
1897 Jan. 6.	N.R.	Misra, Tulsi Ram. <i>Barielly.</i>
1899 Mar. 1.	R.	Mitra, J. C., M.A., B.L. <i>Calcutta.</i>
1901 Aug. 28.	R.	Mitra, Kumar Narendra Nath. <i>Calcutta.</i>
1897 Nov. 3.	R.	Mitra, Saroda Churan, M.A., B.L. <i>Calcutta.</i>
1901 Jan. 2.	N.R.	Mittra, Karttik Chandra, M.A., B.L. <i>Midnapur.</i>
1901 Aug. 7.	N.R.	Molony, E., I.C.S. <i>Ghazipur.</i>
1895 July 3.	N.R.	Monahan, Francis John, I.C.S. <i>Shillong.</i>
1898 May 4.	R.	Mookerjee, R. N. <i>Calcutta.</i>
1898 Sept. 30.	R.	Moore, The Revd. Herbert Octavius, M.A. <i>Calcutta.</i>
1894 June 6.	N.R.	Muhammad Shibli Nomani, Shams-ul-Ulama Maulvie, Professor of Arabic in the Muhammadan Oriental College. <i>Aligarh.</i>
1879 May 7.	A.	Muir, J. W., M. A., I. C. S., (retired). <i>Europe.</i>
1901 Jan. 2.	N.R.	Mukerjee, Dr. U. C. <i>Birbhoom.</i>
1894 Aug. 30.	R.	Mukerjee, Sib Narayan. <i>Uttarpara.</i>
1900 May 2.	R.	Mukerji, Phani Bhushan, B.Sc. <i>Calcutta.</i>
1899 Sept. 29.	R.	Mukharji, Jotindra Nath, B.A. <i>Calcutta.</i>
1886 May 5.	R.	Mukhopadhyaya, The Hon. Dr. Asutosh, M.A., D.L., F.R.A.S., F.R.S.E. <i>Calcutta.</i>
1892 Dec. 7.	R.	Mukhopadhyaya, Panchanana. <i>Calcutta.</i>

Date of Election.		
1901 April 3.	R.	Mullick, Pramatha Nath. <i>Calcutta.</i>
1901 June 5.	N.R.	Mullick, Ramani Mohan. <i>Meherpur.</i>
1885 June 3.	N.R.	Naemwoollah, Maulvie, Deputy Magistrate. <i>Etawah.</i>
1901 Mar. 6.	N.R.	Nevill, H. R., I.C.S. <i>Naini Tal.</i>
1900 Dec. 5.	R.	Nicoll, John. <i>Calcutta.</i>
1889 Aug. 29.	L.M.	Nimmo, John Duncan. <i>Calcutta.</i>
1901 Feb. 6.	R.	Noetling, Dr. F. <i>Calcutta.</i>
1892 Oct. 27.	F.M.	Norvill, Dr. Frederic H. <i>Europe.</i>
1885 Feb. 4.	N.R.	Nyayaratna, Mahāmāhopādhyāya Mahesa Chandra, C.I.E. <i>Benares.</i>
1899 Jan. 7.	N.R.	O'Brien, P. H., I.C.S. <i>Purneah.</i>
1900 Dec. 5.	N.R.	O'Connor, Captain W. F., B.A. <i>Kashmir.</i>
1900 Aug. 29.	A	O'Dwyer, Michael Francis, B.A., I.C.S. <i>Europe.</i>
1880 Dec. 1.	N.R.	Oldham, R. D., A.R.S.M., F.G.S., Geological Survey of India. <i>Karachi.</i>
1883 Aug. 30.	F.M.	Oliver, Edw. Emmerson, M.I.C.E. <i>Europe.</i>
1887 July 6.	N.R.	Oung, Moung Hla. <i>Rangoon.</i>
1901 April 3.	N.R.	Paindsay, V. R. <i>Benares.</i>
1901 Jan. 2.	N.R.	Pande, Pandit Ramavatar. B.A., I.C.S. <i>Jhansi.</i>
1880 Aug. 4.	L.M.	Pandia, Pandit Mohanlall Vishnulall, F.T.S., <i>Muttra.</i>
1901 Aug. 28.	R.	Panton, E. B. H., I.C.S. <i>Calcutta.</i>
1880 Jan. 7.	R.	Pargiter, Frederick Eden, B.A., I.C.S. <i>Calcutta.</i>
1901 June 5.	R.	Parsons, W. <i>Calcutta.</i>
1899 Aug. 2.	N.R.	Peake, C. W., M.A., Bengal Education Service. <i>Bankipur.</i>
1873 Aug. 6.	R.	Pedler, Alexander, C.I.E., F.R.S., Director of Public Instruction, Bengal. <i>Calcutta.</i>
1888 June 6.	L.M.	Pennell, Aubray Percival, B.A., I.C.S. <i>Europe.</i>
1881 Aug. 25.	R.	Percival, Hugh Melville, M.A., Bengal Education Service. <i>Calcutta.</i>
1877 Aug. 1.	N.R.	Peters, Lient.-Colonel C. T., M.B., I.M.S. <i>Bombay.</i>
1889 Nov. 6.	N.R.	Phillott, Major D. C., I.S.C. <i>Kerman, Persia.</i>
1896 Jan. 8.	F.M.	Place, George William, B.A., LL.B., I.C.S. <i>Europe.</i>
1901 June 5.	R.	Porter, Lieut.-Col. G. M., R.E. <i>Calcutta.</i>
1889 Mar. 6.	R.	Prain, Major David, M.A., M.B., LL.D., I.M.S., Royal Botanic Garden. <i>Sibpur.</i>
1889 Mar. 6.	N.R.	Prasad, Hanuman, Raes and Zemindar. <i>Chunar.</i>
1896 Sept. 25.	N.R.	Pringle, A. T. <i>Madras.</i>
1880 April 7.	N.R.	Rai, Bipina Chandra, B.L. <i>Jessore.</i>
1895 Aug. 29.	N.R.	Rai, Jatindra Nath Chandhery, M.A., B.L. <i>Taki.</i>
1901 June 5.	N.R.	Rai, Lala Lajpat. <i>Lahore.</i>
1900 April 4.	R.	Raleigh, The Hon. Mr. T. <i>Calcutta.</i>
1898 Aug. 3.	N.R.	Ram, Sita, M.A. <i>Ballia, N.-W. P.</i>
1890 Mar. 5.	R.	Ray, Prafulla Chandra, D.Sc., Bengal Education Service. <i>Calcutta.</i>

Date of Election.		
1887 May 4.	R.	Ray, Prasanna Kumar, D.Sc. (Lond. and Edin.), Bengal Education Service. <i>Calcutta.</i>
1884 Mar. 5.	R.	Risley, Herbert Hope, B.A., C.I.E., I.C.S. <i>Calcutta.</i>
1900 April 4.	R.	Rogers, Captain Leonard, M.D., B.Sc., M.B.C.P., F.R.C.S., I.M.S. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Rose, H. A., I.C.S. <i>Lahore.</i>
1901 Dec. 4.	R.	Ross, E. Denison, Ph.D. <i>Calcutta.</i>
1896 Dec. 2.	N.R.	Row, B. Suryanaran, B.A. <i>Bellary.</i>
1895 Mar. 6.	A.	Rowe, Frederick James, M.A. <i>Europe.</i>
1889 June 5.	N.R.	Roy, Maharaja Girjanath. <i>Dinagapur.</i>
1885 Mar. 4.	R.	Rustomjee, Harjeebhoy Manickjee. <i>Calcutta.</i>
1896 Aug. 27.	N.R.	Samman, Herbert Frederick, I.C.S. <i>Barisal.</i>
1899 June 7.	N.R.	Sarkar, Chandra Kumar. <i>Kowkanik.</i>
1898 Mar. 2.	R.	Sarkar, Jadu Nath. <i>Calcutta.</i>
1897 Nov. 3.	R.	Saunders, C. <i>Calcutta.</i>
1900 Dec. 5.	R.	Schwaiger, Imre George. <i>Calcutta.</i>
1893 Jan. 11.	L.M.	Scindia, His Highness the Maharaja. <i>Gwalior.</i>
1899 Mar. 1.	R.	Scott, Lieutenant Bernard, I.S.C. <i>Calcutta.</i>
1900 Dec. 5.	N.R.	Sen, Birendra Chandra, I.C.S. <i>Dinajpur.</i>
1901 Aug. 28.	R.	Sen, Upendranath. <i>Calcutta.</i>
1885 April 1.	R.	Sen, Yadu Nath. <i>Calcutta.</i>
1897 Dec. 1.	R.	Seth, Mesroby J., Armenian, Examiner, <i>Calcutta University. Calcutta.</i>
1900 Mar. 7.	R.	Shastree, Pandit Yogesha Chandra. <i>Calcutta.</i>
1885 Feb. 4.	R.	Shastri, Mahāmāhopādhyāya Haraprasād, M.A. <i>Calcutta.</i>
1900 May 2.	R.	Shrager, Adolphe. <i>Calcutta.</i>
1899 May 3.	N.R.	Silberrad, Chas. A., I.C.S. <i>Lalitpur, Bundellhand.</i>
1893 Mar. 1.	N.R.	Singh, Maharaja Kumara Sirdar Bharat, I.C.S. <i>Ghasipur.</i>
1895 Aug. 29.	R.	Singh, Lachmi Narayan, M.A., B.L. <i>Calcutta.</i>
1892 Mar. 2.	L.M.	Singh, The Hon. Raja Ooday Pratab. <i>Binga.</i>
1889 Aug. 29.	N.R.	Singh, H. H. The Maharaja Prabhu Narain, Bahadur. <i>Benares.</i>
1892 Aug. 3.	N.R.	Singh, H. H. The Hon. Maharaja Pratap Narain. <i>Ajodhya, Oudh.</i>
1895 Aug. 29.	N.R.	Singh, Ram Din. <i>Bankipur.</i>
1889 Nov. 6.	N.R.	Singh, H. H. The Hon. Maharaja Rameshwara, Bahadur. <i>Darbhanga.</i>
1894 Feb. 7.	N.R.	Singh, H. H. Raja Vishwa Nath, Bahadur, Chief of <i>Chhatarpur.</i>
1901 Aug. 7.	R.	Singha, Chandra Narayan. <i>Calcutta.</i>
1894 July 4.	N.R.	Sinha, Kunwar Kushal Pal, M.A. <i>Narki P.O., Agra District.</i>
1899 June 7.	N.R.	Sinha, Purnenda Narayan. <i>Bankipur.</i>
1867 April 3.	R.	Sircar, Dr. Mahendra Lal, M.D., C.I.E., D.L. <i>Calcutta.</i>
1897 Jan. 6.	R.	Sircar, Amrita Lal, F.C.S. <i>Calcutta.</i>

Date of Election.		
1872 Aug. 5.	N.R.	Skrefsrud, The Revd. Laurentius Olavi. <i>Rampore Haut.</i>
1901 Dec. 4.	N.R.	Spooner, D. Brainerd. <i>Benares.</i>
1899 Nov. 1.	N.R.	Srivastavya, Lala Shyam Sunder Lal. <i>Pertabgarh.</i>
1898 April 6.	R.	Stark, Herbert, B.A. <i>Calcutta.</i>
1901 Mar. 6.	N.R.	Stebbing, E. P. <i>Dehra Dun.</i>
1891 Aug. 27.	A.	Stein, M. A., PH.D. <i>Europe.</i>
1895 July 5.	A.	Steinberg, Alfred Frederick, I.C.S. <i>Europe.</i>
1899 Aug. 30.	R.	Stephen, St. John, B.A., LL.B. Barrister-at-Law. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Stephenson, Captain John, I.M.S. <i>Jhelum.</i>
1899 Mar. 1.	R.	Tocher, A. <i>Calcutta.</i>
1868 June 3.	R.	Tagore, The Hon. Maharaja Sir Jotendra Mohun, Bahadur, K.C.S.I. <i>Calcutta.</i>
1898 April 6.	R.	Tagore, Maharaja Prodyat Coomar. <i>Calcutta.</i>
1897 Dec. 1.	N.R.	Talbot, W. A. <i>Belgaum.</i>
1893 Aug. 31.	N.R.	Tate, G. P., Survey of India. <i>Hongkong.</i>
1878 June 5.	N.R.	Temple, Colonel Richard Carnac, C.I.E., I.S.C. <i>Port Blair.</i>
1875 June 2.	N.R.	Thibaut, Dr. G., Muir Central College. <i>Allahabad.</i>
1898 Nov. 2.	R.	Thornton, Edward, A.B.I.B.A. <i>Calcutta.</i>
1847 June 2.	L.M.	Thuillier, Lieut.-Genl. Sir Henry Edward Landor, K.T., C.S.I., F.R.S., B.A. <i>Europe.</i>
1891 Aug. 27.	N.R.	Thurston, Edgar. <i>Madras.</i>
1871 April 5.	A.	Trefftz, Oscar. <i>Europe.</i>
1861 June 5.	L.M.	Tremlett, James Dyer, M.A., I.C.S., (retired). <i>Europe.</i>
1893 May 3.	N.R.	Vandja, Raja Ram Chandra. <i>Mayurbhanga, District Balasore.</i>
1898 Feb. 2.	R.	Vasu, Amrita Lal. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Vaughan, Major J. C., I.M.S. <i>Burdwan.</i>
1890 Feb. 5.	N.R.	Venis, Arthur, M.A., Principal, Sanskrit College. <i>Benares.</i>
1901 Mar. 6.	N.R.	Vogel, Dr. J. Ph. <i>Lahore.</i>
1894 Sept. 27.	L.M.	Vost, Major William, I.M.S. <i>Jaunpur.</i>
1895 July 5.	N.R.	Waddell, Lieut.-Col. Lawrence Austine, M.B., LL.D., C.I.E., I.M.S. <i>Almora, N.-W. P.</i>
1901 Aug. 7.	R.	Walker, Dr. T. L. <i>Calcutta.</i>
1900 Jan. 19.	R.	Wallace, David Robb. <i>Calcutta.</i>
1901 June 5.	N.R.	Walsh, E. H., I.C.S. <i>Darjeeling.</i>
1889 Nov. 6.	A.	Walsh, Major John Henry Tull, I.M.S. <i>Europe.</i>
1900 April 4.	N.R.	Walton, Captain Herbert James, M.B., F.R.C.S., I.M.S. <i>Bombay.</i>
1865 May 3.	A.	Waterhouse, Major-General James, I.S.C., (retired). <i>Europe.</i>
1874 July 1.	R.	Watt, Dr. George, C.I.E. <i>Calcutta.</i>

Date of Election.		
1899 Sept. 29.	A.	Welldon, The Most Revd. James Edward Cowell, D.D. <i>Europe.</i>
1896 Feb. 5.	A.	Williams, Captain Charles E., I.M.S. <i>Europe.</i>
1891 May 6.	N.R.	Wilson, Charles Robert, M.A., Bengal Education Service. <i>Bankipur.</i>
1899 Aug. 30.	R.	Wood, E. Seymour, F.G.S. <i>Calcutta.</i>
1892 Jan. 6.	R.	Woodburn, The Hon. Sir John, M.A., K.C.S.I., I.C.S. <i>Calcutta.</i>
1900 Dec. 5.	R.	Woodman, H. C., I.C.S. <i>Calcutta.</i>
1894 Sept. 27.	R.	Woodroffe, John George, Bar.-at-Law. <i>Calcutta.</i>
1894 Aug. 30.	N.R.	Wright, Henry Nelson, B.A., I.C.S. <i>Allahabad.</i>
1898 July 6.	R.	Wyness, James, C.E. <i>Calcutta.</i>

SPECIAL HONORARY CENTENARY MEMBERS.

Date of Election.		
1884 Jan. 15.		Dr. Ernst Haeckel, Professor in the University of Jena.
1884 Jan. 15.		Charles Meldrum, Esq., C.M.G., M.A., LL.D., F.R.A.S., F.R.S. <i>Mauritius.</i>
1884 Jan. 15.		Professor A. H. Sayce, Professor of Comp. Philology. <i>Oxford.</i>
1884 Jan. 15.		Professor Emile Senart, Member of the Institute of France. <i>Paris.</i>

HONORARY MEMBERS.

1848 Feb. 2.		Sir Joseph Dalton Hooker, G.C.S.I., C.B., M.D., D.C.L., LL.D., F.L.S., F.G.S., F.R.G.S., F.R.S. <i>Berkshire.</i>
1860 Nov. 7.		Dr. Albrecht Weber. <i>Berlin.</i>
1875 Nov. 3.		Dr. Otto von Böhtlingk. <i>Leipzig.</i>
1879 June 4.		Professor Edward Bayles Cowell, D.C.L. <i>Cambridge.</i>
1879 June 4.		Dr. Albert Günther, M.A., M.D., PH.D., F.L.S., F.Z.S., F.R.S. <i>Surrey.</i>
1879 June 4.		Dr. Jules Janssen. <i>Paris.</i>
1879 June 4.		Professor P. Regnaud. <i>Lyons.</i>
1881 Dec. 7.		Lord Kelvin, G.C.V.O., D.C.L., LL.D., F.R.S.E., F.R.S. <i>Glasgow.</i>
1883 Feb. 7.		William Thomas Blanford, Esq., LL.D., A.R.S.M., F.G.S., F.R.G.S., F.Z.S., F.R.S. <i>London.</i>
1883 Feb. 7.		Alfred Russell Wallace, Esq., LL.D., D.C.L., F.L.S., F.Z.S., F.R.S. <i>Dorset.</i>
1894 Mar. 7.		Sir George Gabriel Stokes, Bart, M.A., D.C.L., LL.D., D.SC., F.C.P.S., F.R.S.E., F.R.S. <i>Cambridge.</i>
1894 Mar. 7.		Mahāmāhāpodhyāya Chandra Kanta Tarkalankara. <i>Calcutta.</i>
1894 Mar. 7.		Professor Theodor Noeldeke. <i>Strassburg.</i>
1895 June 5.		Lord Rayleigh, M.A., D.C.L., D.SC., LL.D., PH.D., F.R.A.S., F.R.S. <i>Witham, Essex.</i>

Date of Election.	
1895 June 5.	Lt.-Genl. Sir Richard Strachey, R.E., G.C.S.I., LL.D., F.R.G.S., F.G.S., F.L.S., F.R.S. <i>London.</i>
1895 June 5.	Charles H. Tawney, Esq., M.A., C.I.E. <i>London.</i>
1896 Feb. 5.	Lord Lister, F.R.C.S., D.C.L., M.D., LL.D., D.SC., F.R.S. <i>London.</i>
1896 Feb. 5.	Sir Michael Foster, K.C.B., M.A., M.D., D.C.L., LL.D., D.SC., F.L.S., F.C.S., F.R.S. <i>Cambridge.</i>
1896 Feb. 5.	Professor F. Kielhorn, PH.D., C.I.E. <i>Göttingen.</i>
1896 Feb. 5.	Professor Charles Rockwell Lanmann. <i>Massachusetts, U.S.A.</i>
1899 Feb. 1.	Dr. Augustus Frederick Rudolf Hoernle, PH.D., C.I.E. <i>Oxford.</i>
1899 Dec. 6.	Professor Edwin Ray Lankester, M.A., LL.D., F.R.S. <i>London.</i>
1899 Dec. 6.	Sir George King, K.C.I.E., M.B., LL.D., F.L.S., F.R.S. <i>London.</i>
1899 Dec. 6.	Professor Edward Burnett Tylor, D.C.L., LL.D., F.R.S. <i>Oxford.</i>
1899 Dec. 6.	Professor Edward Suess, PH.D., For. Mem. R.S. <i>Vienna.</i>
1901 Mar. 6.	Professor J. W. Judd, C.B., LL.D., F.R.S. <i>London.</i>

CORRESPONDING MEMBER.

Date of Election.	
1866 May 7.	Schlagintweit, Dr. Emil. <i>Zweibrücken.</i>

ASSOCIATE MEMBERS.

1874 April 1.	Lafont, The Revd. Father, E., C.I.E., S.J. <i>Calcutta.</i>
1875 Dec. 1.	Bate, The Revd. J. D., M.R.A.S. <i>Kent.</i>
1875 Dec. 1.	Abdul Hai, Maulvie. <i>Calcutta.</i>
1882 June 7.	Giles, Herbert. <i>Europe.</i>
1884 Aug. 6.	Moore, F., F.L.S. <i>Surrey.</i>
1885 Dec. 2.	Führer, Dr. A. <i>Europe.</i>
1886 Dec. 1.	Das, Rai Bahadur Sarat Chandra, C.I.E. <i>Calcutta.</i>
1892 April 6.	Samasrami, Satya Vrata. <i>Calcutta.</i>
1892 Dec. 7.	Brühl, P. J. <i>Sibpur.</i>
1899 April 5.	Sanyal, Rai Bahadur Ram Brahma. <i>Calcutta.</i>
1899 April 5.	Bhandari, Visnu Prasad Raj. <i>Nepal.</i>
1899 Nov. 1.	Francotte, The Revd. Father E., S.J. <i>Calcutta.</i>

LIST OF MEMBERS WHO HAVE BEEN ABSENT FROM
INDIA THREE YEARS AND UPWARDS.*

* *Rule 40.*—After the lapse of 3 years from the date of a member leaving India, if no intimation of his wishes shall in the interval have been received by the Society, his name shall be removed from the List of Members.

The following members will be removed from the next Member List of the Society, under the operation of the above Rule:—

Arthur William Davis, Esq., I.C.S.

J. W. Muir, Esq., M.A., I.C.S.

Frederick James Rowe, Esq., M.A.

LOSS OF MEMBERS DURING 1901.

BY RETIREMENT.

Maulavie Abdul Aziz Khan, B.A.

Julian James Cotton, Esq., B.A., I.C.S.

William Dods, Esq.

Ernest Binfield Havell, Esq.

Sayid Mahomed Latif Khan Bahadur.

Vincent Arthur Smith, Esq., I.C.S.

Shams-ul-Ulama Muhammad Zaka-ullah.

BY DEATH.

Nawab Ashan-ullah Khan Bahadur.

The Most Revd. Paul Goethals, D.D., S.J.

Surgeon-General Robert Harvey, M.D., LL.D., F.R.C.P., C.B., D.S.O.

Dr. Albrecht von Krafft, PH.D.

Babu Shamlal Mullick.

Lionel deNiceville, Esq., F.E.S., C.M.Z.S.

G. F. Reader, Esq.

BY REMOVAL.

Under Rule 9.

Dr. Thomas H. Aquino.

O. V. Bosanquet, Esq., I.C.S.

Babu Rajchandra Chandra.

Maulavie Mahomed Abdullah, M.A.

C. A. Radice, Esq., I.C.S.

Kumar Birendra Chandra Singh.

Under Rule 38.

Pandit Behari Lal Chaube.

Dr. Sarat Chandra Laharry, PH.D.

Babu Rajeswar Mitra.

Thakur Garuradhawaya Prasad Singh.

Donald Sunder, Esq.

Pandit Mahendra Nath Vidyanidhi.

Under Rule 40.

Henry Kerchener Walter Arnold, Esq.

J. A. Cave-Brown, Esq., I.C.S.

Romesh Chunder Dutt, Esq., C.I.E., I.C.S. (retired.)

Frederick Alexander Shillingford, Esq.

Dr. W. J. Simpson.

[APPENDIX.]

ABSTRACT STATEMENTS
OF
RECEIPTS AND DISBURSEMENTS
OF THE
ASIATIC SOCIETY OF BENGAL
FOR
THE YEAR 1901.

1901.

STATEMENT
Asiatic Society

Dr.

To ESTABLISHMENT.

				Rs.	As.	P.	Rs.	As.	P.
Salaries	...	...	...	3,956	8	9			
Commission	...	...	...	424	3	2			
Pension	...	...	...	56	0	0			
							4,436	11	11

To CONTINGENCIES.

Stationery	...	...	...	117	1	0			
Lighting	...	...	...	42	8	0			
Taxes	...	...	...	884	4	0			
Postage	...	...	...	542	2	6			
Freight	...	...	...	78	8	5			
Meeting	...	...	...	85	9	0			
Auditor's fee	...	...	...	100	0	0			
Miscellaneous	...	...	...	307	7	0			
Registration fee	...	...	...	15	0	0			
							2,167	7	11

To LIBRARY AND COLLECTIONS.

Books	...	...	...	288	9	7			
Binding	...	...	...	688	13	0			
Catalogue	...	...	...	100	0	0			
							1,077	6	7

To PUBLICATIONS.

Journal, Part I ..	...	...	...	958	0	0			
Journal, Part II ...	...	...	...	896	10	0			
Journal, Part III ..	...	...	...	1,273	15	0			
Proceedings	...	...	...	480	8	0			
							3,609	1	0
To Printing charges of Circulars, Receipt-forms, &c.			...				207	1	0
„ Personal Account (Writes-off and Miscellaneous)			...				423	2	0

To EXTRAORDINARY EXPENDITURE.

Royal Society's Scientific Catalogue	...	...	...	450	9	9			
Furniture	...	...	...	112	10	0			
Repairs	...	...	...	5,050	1	3			
Insurance fee	...	...	...	312	8	0			
							5,925	13	0
Balance	...	...	...				1,61,059	0	3
Total Rs.			...				1,78,905	11	8

No. 1.

of Bengal.

1901.

Cr.

			Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report			1,59,276	6	0
By CASH RECEIPTS.								
Publications sold for cash	325	10	9		
Interest on Investments	3,445	12	0		
Rent of Rooms on the Society's ground floor	1,200	0	0		
Allowance from Government of Bengal for the Publication of Anthropological and Cognate Subjects	2,000	0	0		
Ditto from Government of Assam	1,000	0	0		
Ditto from Government of India for Royal Society's Scientific Catalogue	1,000	0	0		
Miscellaneous	81	7	3		
							9,052	14 0
Max Müller Memorial Fund				140	0 0
By PERSONAL ACCOUNT.								
Admission fees	1,344	0	0		
Subscriptions	8,353	0	0		
Sales on credit	461	0	0		
Miscellaneous	278	7	8		
							10,436	7 8

Total Rs.	...	<u>1,78,905 11 8</u>
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W. K. Dods,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
 MEUGENS, KING & SIMSON,
Auditors.

STATEMENT

1901. Oriental Publication Fund in Account

Dr.

TO CASH EXPENDITURE.

				Rs.	As.	P.	Rs.	As.	P.
Printing charges	...	...	...	5,926	14	0			
Editing charges	...	...	...	4,172	13	2			
Salaries	...	...	...	1,573	11	3			
Freight	...	...	...	59	12	0			
Stationery	...	...	...	95	5	0			
Postage	...	...	...	308	1	9			
Commission on collection	...	...	...	23	15	3			
Contingencies	...	...	...	173	2	6			
							12,333	10	11
To Personal Account (Writes-off and Miscellaneous)			...				20	13	0
Balance			...				8,940	5	2
Total Rs.			...				21,294	13	1

STATEMENT

Sanskrit Manuscript Fund in Account

Dr.

TO CASH EXPENDITURE.

				Rs.	As.	P.	Rs.	As.	P.
Salaries	...	...	...	1,004	0	0			
Travelling charges	...	...	...	325	9	6			
Printing	...	...	...	895	0	0			
Postage	...	...	...	38	9	6			
Stationery	...	...	...	2	8	0			
Furniture	...	...	...	353	8	0			
Contingencies	...	...	...	239	3	0			
							2,858	6	0
To Personal Account (Writes-off and Miscellaneous)			...				3	0	0
Balance			...				7,345	12	2
Total Rs.			...				10,207	2	2

No. 2.

with the Asiatic Society of Bengal. 1901.

Cr.

			Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report			10,561	12	11
BY CASH RECEIPTS.								
Government allowance	9,000	0 0			
Publications sold for cash	607	11 5			
Advances recovered	61	13 3			
						9,669	8	8
BY PERSONAL ACCOUNT.								
Sales on credit	1,057	12 6			
Miscellaneous	5	11 0			
						1,063	7	6
Total Rs.						21,294	13	1

W. K. Dods,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
 MEUGENS, KING & SIMSON,
Auditors.

No. 3.

with the Asiatic Society of Bengal.

Cr.

			Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report			6,952	2	2
BY CASH RECEIPTS.								
Government allowance	3,200	0 0			
Publications sold for cash	29	0 0			
						3,229	0	0
BY PERSONAL ACCOUNT.								
Sales on credit			26	0	0
Total Rs.						10,207	2	2

W. K. Dods,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
 MEUGENS, KING & SIMSON,
Auditors.

1901.

STATEMENT

Personal

Dr.

			Rs.	As.	P.	Rs.	As.	P.
To Balance from last Report	...	...	...			2,239	12	9
To CASH EXPENDITURE.								
Advances for purchase of Sanskrit Manuscripts, &c.	...	...	...			948	12	11
To Asiatic Society	...	...	10,436	7	8			
„ Oriental Publication Fund	...	...	1,068	7	6			
„ Sanskrit Manuscript Fund	...	...	26	0	0			
						11,525	15	2

Total Rs. ... 14,714 8 10

STATEMENT

Invest

Dr.

		Value.		Cost.	
		Rs.	As. P.	Rs.	As. P.
To Balance from last Report	...	1,65,800	0 0	1,65,730	8 4
„ Cash	...	5,000	0 0	4,809	5 6
Total Rs.		1,70,800	0 0	1,70,539	13 10

FUNDS.*	PERMANENT.						TEMPORARY.						TOTAL Cost.		
	Value.			Cost.			Value.			Cost.					
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Asiatic Society ...	1,45,900	0	0	1,45,467	10	0	23,100	0	0	23,776	7	1	1,69,244	1	1
Trust Fund ...	1,300	0	0	1,325	12	9	...	...	...	...	...	...	1,295	12	9
	1,47,200	0	0	1,46,793	6	9	23,100	0	0	23,776	7	1	1,70,539	13	10

No. 4.

Account.

1901.

Cr.

				Rs.	As.	P.	Rs.	As.	P.
By Cash Receipts	...	...	...	...	...	...	11,166	7	8
" Asiatic Society	...	...	...	423	2	0			
" Oriental Publication Fund	...	...	...	20	13	0			
" Sanskrit Manuscript Fund	...	...	...	3	0	0			
							446	15	0

By Balance.	Due to the Society.			Due by the Society.		
	Rs.	As.	P.	Rs.	As.	P.
Members ...	3,775	6	8	271	11	0
Employés ...	30	0	0	350	0	0
Miscellaneous	56	15	2	139	8	3
	3,862	5	10	761	3	3

... 3,101 2 7

Total Rs. ... 14,714 8 10

W. K. Doss,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
MEUGENS, KING & SIMSON,
Auditors.

No. 5.

ment.

Cr.

				Value.			Cost.		
				Rs.	As.	P.	Rs.	As.	P.
By Balance *	1,70,300	0 0	1,70,539	13	10
Total Rs.				...	1,70,300	0 0	1,70,539	13	10

W. K. Doss,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
MEUGENS, KING & SIMSON,
Auditors.

STATEMENT *Trust*

1901.

Dr.

						Rs. As. P.
To Pension ...	...	...	...	...	...	48 0 0
„ Balance ...	...	...	...	...	...	1,299 11 10
Total Rs.						1,347 11 10

STATEMENT *Cash*

Dr.

						Rs. As. P.
To Balance from last Report ...	...	...	...	...	...	10,167 11 10
RECEIPTS.						
To Asiatic Society ..	...	...	...	...	...	9,192 14 0
„ Oriental Publication Fund ...	...	...	...	...	...	9,669 8 8
„ Sanskrit Manuscript Fund ...	...	...	...	...	...	3,229 0 0
„ Personal Account ...	...	...	...	...	...	11,166 7 3
Total Rs.						43,425 9 9

STATEMENT *Balance*

Dr.

						Rs. As. P.
To Cash ...	...	...	...	...	...	5,008 13 0
„ Investments ...	...	...	...	...	...	1,70,539 13 10
„ Personal Account...	...	...	...	...	...	8,101 2 7
Total Rs.						1,78,644 13 5

No. 6.

Fund.

1901.

Cr.

					Rs. As. P.
By Balance from last Report	...	...	...	...	1,347 11 10
Total Rs.					1,347 11 10

W. K. Dods,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
MEUGENS, KING & SIMSON,
Auditors.

No. 7.

Account.

Cr.

EXPENDITURE.

					Rs. As. P.
By Asiatic Society	...	...	...	...	17,423 9 5
" Oriental Publication Fund	...	...	...	...	12,333 10 11
" Sanskrit Manuscript Fund	...	...	...	...	2,558 6 0
" Personal Account	...	...	...	...	948 12 11
" Investments	...	...	...	...	4,809 5 9
" Trust Fund	...	...	...	...	48 0 0
Balance					5,003 13 0
Total Rs.					43,425 9 9

W. K. Dods,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
MEUGENS, KING & SIMSON,
Auditors.

No. 8.

Sheet.

Cr.

					Rs. As. P.
By Asiatic Society	...	...	...	...	1,61,059 0 3
" Oriental Publication Fund	...	...	...	...	8,940 5 2
" Sanskrit Manuscript Fund	...	...	...	...	7,345 12 2
" Trust Fund	...	...	...	...	1,299 11 10
Total Rs.					1,78,644 13 5

W. K. Dods,
Honorary Secretary and Treasurer,
Asiatic Society of Bengal.

Examined and found correct.
MEUGENS, KING & SIMSON,
Auditors.

List of all Societies, Institutions, &c., to which the Publications of the Asiatic Society have been sent during the year, or from which publications have been received.

* Societies, &c., which have received the Asiatic Society's publications, and have sent their publications in return.

† Societies, &c., which have received the Asiatic Society's publications, but have sent none in return.

§ Societies, &c., whose publications have been received, but to which none have been sent in return.

* Aberdeen :—University of Aberdeen.

* Adelaide :—Royal Geographical Society of Australasia.

* Allahabad :—Editor, *Pioneer*.

† Amsterdam :—Royal Zoological Society.

* ——— :—Koninklijke Akademie van Wetenschappen.

* Angers :—Société d' Etudes Scientifiques d' Angers.

* Baltimore :—Johns Hopkins University.

* Batavia :—Society of Arts and Sciences.

* ——— :—Kon. Natuurkundige Vereeniging in Nederlandsch-Indië.

§ Bellary :—Editor, *Astrological Magazine*.

* Benares :—Nagari Pracharini Sabha.

* Berlin :—Entomologischer Verein.

* ——— :—Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte.

† ——— :—Gesellschaft Naturforschender Freunde zu Berlin.

* ——— :—Royal Academy of Sciences.

* ——— :—Seminar für Orientalische Sprachen.

§ ——— :—Laboratorium & Museum.

† Berne :—Société Suisse d' Entomologie.

§ Birmingham :—Natural History and Philosophical Society.

* Bombay :—Bombay Anthropological Society.

* ——— :—Bombay Branch, Royal Asiatic Society.

* ——— :—Editor, *Indian Antiquary*.

* ——— :—Natural History Society.

§ ——— :—Government Observatory.

§ ——— :—Marine Survey of India.

† Bonn :—University of Bonn.

* Bordeaux :—Académie Nationale des Sciences, Belles-Lettres et Arts.

* ——— :—Société Linnéenne.

* Boston :—Natural History Society.

§ ——— :—American Oriental Society.

* Brisbane :—Royal Society of Queensland.

- § Brisbane :—Queensland Museum.
 § ——— :—Department of Agriculture.
 † Brookville :—Society of Natural History.
 * Brunswick :—Verein für Naturwissenschaft.
 * Brussels :—Académie Royale des Sciences.
 † ——— :—Musée Royal d' Histoire Naturelle de Belgique.
 * ——— :—Société Entomologique de Belgique.
 * ——— :—Société Royale Malacologique de Belgique.
 * ——— :—Société Royale des Sciences de Liège.
 § ——— :—Musée du Congo.
 † Budapest :—Hungarian Central Bureau for Ornithological Observations.
 * ——— :—Royal Hungarian Academy of Sciences.
 § ——— :—Société Hongroise de Géographie.
 § ——— :—Editor, *Aquila*.
 * Buenos Ayres :—National Museum.
 † ——— :—Academia Nacional de Ciencias de la Republica Argentina.
 * Caen :—Société Linnéenne de Normandie.
 * Calcutta :—Agri-Horticultural Society of India.
 * ——— :—Geological Survey of India.
 * ——— :—Editor, *Englishman*.
 § ——— :—Editor, *Indian and Eastern Engineer*.
 * ——— :—Editor, *Indian Daily News*.
 § ——— :—Editor, *Indian Engineering*.
 * ——— :—Editor, *Indian Mirror*.
 § ——— :—Editor, *Indian Lancet*.
 * ——— :—Indian Meteorological Department.
 * ——— :—Indian Museum.
 § ——— :—Institution of Electrical Engineers.
 § ——— :—Maha-bodhi Society.
 § ——— :—Photographic Society of India.
 * ——— :—Royal Botanic Gardens.
 * ——— :—Survey of India.
 * ——— :—Tuttobodhini Shova.
 * ——— :—Sanskrit College.
 § ——— :—Imperial Library.
 § ——— :—Botanical Survey of India.
 † ——— :—University Library.
 § ——— :—Editor, *Indian Gardening and Planting*.
 † ——— :—Mahomedan Literary Society.
 * Cambridge :—University Library.
 * Cape Town :—South African Museum.

- * Cape Town :—South African Philosophical Society.
- † Cassel :—Verein für Naturkunde.
- † Cherbourg :—Société Nationale des Sciences Naturelles.
- * Chicago, Ill. :—Field Columbian Museum.
- * Christiana :—University Library.
- † Clinton, Wiss. :—Editor, *American Antiquarian and Oriental Journal*.
- * Colombo :—Ceylon Branch, Royal Asiatic Society.
- * Copenhagen :—Société Royale des Antiquaires du Nord.
- † Cuttack :—Cuttack Library.
- * Danzig :—Naturforschende Gesellschaft.
- * Dehra Dun :—Great Trigonometrical Survey.
- * Dresden :—Entomologischer Verein "Iris."
- * ——— :—Königlich Zoologisches und Anthropologisch-Ethnographisches Museum.
- † Dublin :—Royal Dublin Society.
- * ——— :—Royal Irish Academy.
- † Edinburgh :—Royal Society.
- § ——— :—Royal Physical Society.
- † ——— :—Scottish Geographical Society.
- * Florence :—Società Italiana d' Antropologia e Etnologia.
- † ——— :—Società Africana d'Italia.
- * Frankfurt :—Senckenbergische Naturforschende Gesellschaft.
- * ——— :—Naturwissenschaftlicher Verein des Reg.-Bez. Frankfurt.
- * Geneva :—Société de Physique et d' Histoire Naturelle.
- * Genoa :—Museo Civico di Storia Naturale.
- † Giessen :—Oberhessische Gesellschaft für Natur und Heilkunde.
- * Graz :—Naturwissenschaftlicher Verein für Styria.
- § Greenwich :—Royal Observatory.
- * The Hague :—Koninklijk Instituut voor de Taal- Land- en Volkenkunde van Nederlandsch-Indië.
- * ——— :—Netherlands Entomological Society.
- * ——— :—The State Archives.
- § Halifax :—Nova Scotian Institute of Science.
- * ——— :—Kaiserliche Leopoldinisch-Carlinische Akademie.
- † Hamburg :—Naturhistorisches Museum.
- † ——— :—Naturwissenschaftlicher Verein.
- * Hamilton (Canada) :—Hamilton Association.
- * Havre :—Société de Géographie Commerciale du Havre.
- * Helsingfors :—Societas pro Flora et Fauna Fennica.
- * ——— :—Société Finno-Ougrienne.
- * ——— :—Société des Sciences de Finlande.

- * Honolulu :—Bernice Pauahi Bishop Museum.
- § Indianapolis, Ind. :—Academy of Sciences.
- § ————— :—Geological Survey.
- § Ithaca :—Cornell University.
- † Kiew :—Société des Naturalistes.
- * Königsberg :—Physikalische-Oekonomische Gesellschaft.
- † La Plata :—Museo de La Plata.
- * Lahore :—Editor, *Civil and Military Gazette*.
- † ——— :—Agricultural Society.
- * Lawrence, Kansas :—Kansas University.
- * Leipzig :—Deutsche Morgenländische Gesellschaft.
- § ——— :—K. Sächsische Gesellschaft der Wissenschaften.
- † Leyden :—Royal Herbarium.
- * Liège :—Société Géologique de Belgique.
- * Liverpool :—Literary and Philosophical Society.
- † ——— :—University College.
- * London :—Anthropological Institute.
- * ——— :—Editor, *Academy*.
- * ——— :—Editor, *Athenæum*.
- * ——— :—British Museum.
- * ——— :—Geological Society.
- § ——— :—India Office.
- * ——— :—Institution of Civil Engineers.
- * ——— :—Institution of Electrical Engineers.
- * ——— :—Institution of Mechanical Engineers.
- * ——— :—Editor, *Nature*.
- * ——— :—Linnean Society.
- * ——— :—Royal Asiatic Society of Great Britain and Ireland.
- * ——— :—Royal Astronomical Society.
- * ——— :—Royal Geographical Society.
- * ——— :—Royal Institution of Great Britain.
- * ——— :—Royal Microscopical Society.
- * ——— :—Royal Society.
- * ——— :—Royal Statistical Society.
- * ——— :—Zoological Society.
- § ——— :—British Association.
- § Lucknow :—Government Horticultural Gardens.
- § ——— :—Provincial Museum.
- † Lyons :—Société d' Agriculture, d' Histoire Naturelle et des Arts
Utiles.
- † ——— :—Muséum d' Histoire Naturelle.

- † Lyons:—Société d' Anthropologie.
- * Madison, Wis.:—Wisconsin Academy of Sciences, Arts and Letters.
- § Madras:—Agri-Horticultural Society.
- § ———:—British Medical Association.
- † ———:—Literary Society.
- * ———:—Government Central Museum.
- § ———:—Editor, *Indian Journal of Education*.
- § ———:—Government Observatory.
- * Manchester:—Literary and Philosophical Society.
- † Massachusetts:—Tufts College.
- § Mauritius:—Royal Alfred Observatory.
- § Melbourne:—Australasian Association.
- * ———:—Royal Society of Victoria.
- * Mexico:—Sociedad Científica "Antonio Alzate."
- § ———:—Instituto Geológico.
- § Montevideo:—Museo Nacional de Montevideo.
- * Moscow:—Société Impériale des Naturalistes.
- * Munich:—K. Bayerische Akademie der Wissenschaften.
- § ———:—Ornithologischer Verein.
- § Mysore:—Geological Department.
- § ———:—Meteorological Department.
- § Nagpur:—Experimental Farm.
- * Nantes:—Société des Sciences Naturelles de l' Ouest de la France.
- † Naples:—Società Africana d' Italia.
- * New Haven:—Connecticut Academy of Arts and Sciences.
- § ———:—Yale University.
- * Newport (R. I.):—Natural History Society.
- * New York:—American Museum of Natural History.
- * Nürnberg:—Naturhistorische Gesellschaft.
- * Ottawa:—Geological and Natural History Survey of the Dominion of
Canada.
- § ———:—Literary and Scientific Society.
- § ———:—Royal Society of Canada.
- † Oxford:—Bodleian Library.
- † ———:—Indian Institute.
- § ———:—Oxford University Museum.
- * Paris:—Société de Géographie.
- * ———:—Société d' Anthropologie.
- * ———:—Société Asiatique.
- § ———:—Société Philomathique de Paris.
- * ———:—Musée Guimet.
- † ———:—National Library.

- * Paris :—Société Zoologique.
- † ——— :—Société Académique Indo-Chinoise.
- * ——— :—Muséum d' Histoire Naturelle.
- * Pennsylvania :—University of Pennsylvania.
- * Philadelphia :—Academy of Natural Sciences.
- § ——— :—American Academy of Political and Social Science.
- * ——— :—American Philosophical Society.
- § ——— :—Franklin Institute.
- † ——— :—Editor, *Journal of Comparative Medicine and Surgery*.
- * Pisa :—Società Toscana di Scienze Naturali.
- § Prague :—K. K. Sternwarte.
- § Rio de Janeiro :—Observatorio do Rio de Janeiro.
- § Rome :—Società degli Spettroscopisti Italiani.
- * ——— :—Società Romana di Antropologia.
- § ——— :—R. Accademia dei Lincei.
- § Roorkee :—Editor, *Indian Forester*.
- * Saigon :—École Française d'Extrême Orient.
- § St. Louis :—Academy of Sciences.
- * St. Petersburg :—Comité Géologique.
- † ——— :—Imperial Library.
- * ——— :—Russian Geographical Society.
- * ——— :—Académie Impériale des Sciences.
- * ——— :—Hortus Petropolitannus.
- § ——— :—Russisch-Kaiserliche Mineralogische Gesellschaft.
- § Saharanpur :—Government Botanical Gardens.
- * San Francisco :—Californian Academy of Arts and Sciences.
- * Seoul :—Korea Branch, Royal Asiatic Society.
- * Shanghai :—China Branch, Royal Asiatic Society.
- * Simla :—United Service Institution of India.
- § Singapore :—Straits Branch, Royal Asiatic Society.
- * Springfield, Ill :—Illinois State Laboratory of Natural History.
- § ——— :—Newberry Library.
- * Stettin :—Entomological Society.
- * Stockholm :—Entomologiske Tidsskrift.
- * ——— :—Royal Swedish Academy of Sciences.
- * ——— :—Royal Academy of Belles Lettres, History and Antiquities.
- * Stuttgart :—Verein für vaterländische Naturkunde in Württemberg.
- * Sydney :—Royal Society of New South Wales.
- † ——— :—Anthropological Society of Australia.

- * Sydney:—Linnean Society of New South Wales.
- § ———:—Editor, *Science of Man*.
- § Taiping:—Government of Perak.
- * Toronto:—Canadian Institute.
- * Tokyo:—Imperial University of Japan.
- † Trieste:—Società Adriatica di Scienze Naturali.
- † ———:—Museo Civico di Storia Naturale.
- * Tring:—Zoological Museum.
- * Turin:—Reale Accademia delle Scienze.
- † Ulwar:—Ulwar Library.
- * Upsala:—University of Upsala.
- * Valparaiso:—Deutscher Wissenschaftlicher Verein.
- † ———:—Museo de Historia Natural de Valparaiso.
- * Vienna:—Anthropologische Gesellschaft.
- * ———:—K. K. Akademie der Wissenschaften.
- * ———:—K. K. Geologische Reichsanstalt.
- * ———:—K. K. Naturhistorisches Hofmuseum.
- † ———:—Ornithologischer Verein in Wien.
- * ———:—K. K. Zoologisch-Botanische Gesellschaft.
- § Washington:—Biological Society of Washington.
- † ———:—Bureau of Statistics.
- * ———:—Commissioners of the Department of Agriculture.
- * ———:—Smithsonian Institution.
- § ———:—United States Department of Labor.
- * ———:—United States Geological Survey.
- § ———:—United States National Museum.
- § ———:—Academy of Sciences.
- * Wellington:—New Zealand Institute.
- * ———:—Polynesian Society.
- * Yokohama:—Asiatic Society.
- * ———:—Deutsche Gesellschaft für Natur- und Völkerkunde Ostasiens.
- * Zagreb:—Archæological Society.
- † Zurich:—Naturforschende Gesellschaft.

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR JANUARY, 1902.

The Monthly General Meeting of the Society was held on Wednesday, the 8th January 1902, at 9 p.m.

H. H. Sir John Woodburn, M.A., K.C.S.I., President, in the chair.

The following members were present :—

The Hon'ble Mr. C. W. Bolton, C.S.I., Major W. J. Buchanan, I.M.S., Dr. A. Caddy, Mr. B. Chaudhuri, Kumar Satindra Deb Rai Mahasai, Mr. W. K. Dods, Mr. W. A. Lee, Mr. J. Macfarlane, Kumar Ramessur Maliah, Mr. J. D. Nimmo, Mr. F. E. Pargiter, Captain L. Rogers, I.M.S., Mr. M. J. Seth, Mahamahopādhyāya Haraprasād Shāstri, Mr. E. Thornton, Mr. J. Wyness.

Visitors :—Mr. A. Crowley, Kumar Kshitindra Deb Rai Mahasa, Kumar Maumdra Deb Rai Mahasai.

The minutes of the last meeting were read and confirmed.

Twenty-eight presentations were announced.

Mr. J. R. Drummond, I.C.S., and Babu Parmeshwara Lall were ballotted for and elected Ordinary Members.

Mr. Vincent A. Smith expressed a wish to withdraw from the Society.

The General Secretary reported the death of Nawab Ashanulla Khan Bahadur, of Dacca, an Ordinary Member of the Society.

The President announced that he had received four essays in competition for the Elliott Prize for Scientific Research for the year 1901.

The question of disposing of the Society's premises, of which intimation had already been given by circular to all resident Members in accordance with Rule 64A, was brought up for discussion.

The Meeting considered the Report of the Sub-Committee and decided that the matter be referred back to the Sub-Committee with the request to frame an estimate of the probable cost of acquiring a new site and erecting a new building with and without accommodation for a Secretary in a suitable neighbourhood, and also to take such steps as might seem sufficient to ascertain definitely what sum is likely to be received by the sale of the present house and site.

Proposed by the Hon'ble Mr. C. W. Bolton, C.S.I., and seconded by Captain L. Rogers, I.M.S., and carried.

The following papers were read :—

1. *On Trilokanātha in the Kayḍā Valley.*—By J. PH. VOGEL, LL.D.

(ABSTRACT.)

The writer himself gives the substance of his paper in the following terms :—

"The substance of the present paper may be briefly stated thus: That in the Candrabhāgā Valley and also in the southern side of the mid-Himalayan Range on the Upper Biās, Trilokanātha is the name by which the Bodhisattva Avolokiteṣvara is indicated, while along the lower course of the Biās river the same name is assigned to Īṣa represented either as a linga or as a five-faced statue which in its attributes shows a marked resemblance to some of Avalokita's images."

*Remarks :—*Avalokita's attributes resemble those of Viṣṇu of the Hindu Pantheon, the preserver of the Universe, one who is all good. In Patan, Nepal, he is often the same as the Sun God without the horses and the chariot. At Vaidyanātha an image of this deity is worshipped as Sūryanārāyaṇa.

2. *On the Secret Words of the Ālūās.*—By THE REV. T. G. BAILEY, M.A.

(ABSTRACT.)

This is a very interesting paper on the tribe of hereditary thieves and cattle poisoners of the Punjab. They poison cattle because they eat the carcass. Each company of Ālūās has one cattle-poisoner, who charges six or eight annas for poisoning a suitable animal. They kill cows and buffalos with balls of poison,—white, black, and green,—but horses do not

take poisoned food, so they kill horses with poisoned sharp-pointed instruments.

The Çulūās never reveal the secret of their language and their words. They have no grammar like the Sāsīs. They form their secret words by the insertion of *ma* into Panjabi words, just as *skul* is changed into *skumal*.

3. *On the Organization of Caste by Ballala Sen.*—By MAHĀMAHO-PĀDHYĀYA HARAPRASĀD SHĀSTRĪ, M.A.

It will be remembered that at the last general meeting I read two papers, one on the Authenticity of Vallālācarita and the other on the existence of the Ancient Magi in India, even up to the present day. The materials for the latter paper were drawn from the newly-discovered MSS. of Vallālācarita by Ananda Bhaṭṭa. In the present paper I purpose to give a brief outline of the re-organization of the Caste System by Vallāla 800 years ago. But before commencing the paper I cannot help bringing to your notice a striking confirmation of my theory about the Magi from a more ancient and a more authentic source. My friend and pupil, Babu Gungāmohan Laskara, M.A., a post-graduate scholar, is engaged in deciphering an ancient MS. brought by me from Nepal and exhibited at this meeting about two years ago. The MS., I believe, was copied about 550 A.D. It is written in the same characters as the Horinzi palm-leaves in Japan. In the ninth leaf of the MS., on the reverse side, there is a verse in the future tense—a prophetic utterance no doubt — **ब्राह्मणान् मगानाञ्च समलं जायते कश्चि**. In the Kaliyuga Brāhmaṇas and Magas will be regarded as equals. So even in that ancient time, when Nasirvan was making war on the Rājās of Gujerat or even some centuries before it, good people in India were labouring under the apprehension that Brāhmaṇas and the Magi will, at some future time, occupy the same position.

Now to my present paper. I consider those chapters of the Carita as most authentic which are connected with the name of Çaraṇa Datta, a contemporary poet of Vallāla, and I will see what Çarana has to say about the re-organization of the caste system by Vallāla.

Vallāla in these chapters is said to have performed a great sacrifice, invited all the four castes with the innumerable mixed castes, and fed them and honoured them all according to their deserts. The Sonāra banias, however, who prided themselves as Vaiçyas, had no separate accommodation provided for them. They complained and they were told to go with the clean Çūdras. They resented it and left the place. Their overbearing conduct was reported to the king and he declared that they should be degraded and any Brāhmaṇa teaching them or officiating in their religious ceremonies should be excommunicated

This order of degradation was communicated to all the officers of the State and proclaimed by beat of drums throughout Vallāla's vast empire. The Brāhmaṇas complained that the banias have a fair colour and that they are very handsome. They should not be allowed to wear the holy thread, because in that case, Brāhmaṇas by mistake may make obeisance to them, and so Vallāla ordered that their holy thread should be snatched away. Most of the banias fled from Vallāla's dominions, and those who remained had to submit to his terms, i.e., had to give up the holy thread. But the rich, influential, and haughty bania cannot be expected to tamely brook all this ZULUM on them. They retaliated in a manner worthy of banias. The slave-traders were Brāhmaṇas and the bania used to grant them accommodation. They now stopped slave trade in Vallāla's kingdom. People in great distress implored the king to do something to alleviate their sufferings, and he proclaimed that the Kaivarttas should henceforth be regarded as clean Çūdras and that their services should be accepted. Thousands and thousands of Kaivarttas accepted domestic service, and their leader, Maheṣa, who was a "Mahattara" (a nobleman) already, was made a Mahāmāṇḍalika, a provincial governor, and sent to Dakṣiṇaghatā with all his warlike followers. So Vallāla degraded the banias and raised the Kaivarttas. The garland-makers, the potters, and the blacksmiths then implored the king to raise their position in the caste hierarchy and the Rājā proclaimed that they should be regarded as clean Çūdras. He made Dhāra, his servant, a Mahattara (a nobleman) and his barber a Thākura.

This is a short summary of the three most important and three most authentic chapters of the *Carita* connected with the name of Çaraṇa Datta. Now I will try to interpret them. The charges against the Sonār banias were (1) That they left Vallāla's feast because they thought they were slighted and treated as Çūdras; (2) they ridiculed the Brāhmaṇas, called them names, and openly charged them with being the descendants of female slaves; (3) their leader, to whom they were greatly attached, sided with the Pālas, the Buddhist kings of Magadha, with whom Vallāla was often at war; and (4) that this leader gave his daughter in marriage to the Buddhist Pāla king of Magadha and therefore he had great influence in his own caste.

These charges have been formulated in Çaraṇa's chapters. But in another chapter, namely in chapter II, for which Ananda Bhaṭṭā himself is responsible, there are two more charges very distinct. One is that Ballabha, the headman of the banias, refused to advance Vallāla money to prosecute a war against Magadha, though on a former occasion he advanced a crore of rupees. The other is that the banias slighted the Brāhmaṇas and slighted Vallāla too. Their conduct was haughty and over bearing.

These are the charges on which Vallāla degraded a whole caste and excommunicated them from the community of four castes and they are of a grave nature. The charges show that the banias were Buddhists. It is the Sets and Banias who figure prominently in the Buddhist records. They took to Buddhism in numbers. And in Bengal, where Hinduism, or, to say more strictly Brahmanism had to be re-introduced under the Brāhmanas and their faithful adherents, the Kāyasthas, the Buddhists, formed the upper lay community, and they always looked with a jealous eye on the preponderance of a rival faith, of the priesthood of that faith, and of its lay followers.

Vallāla, as represented by Ananda Bhaṭṭa, early sympathized with the Buddhists, I mean Tāntrika Buddhists of a later date. Following the obscene rites of these degraded Buddhists, he used the girl of an actress, a *nati*, and a *caṇḍālī* of twelve years of age. But a monk from Vadarikā Ćrama converted him into Ćaivism and he became an out-and-out Brahminist and, I believe, a persecutor of his former faith, as all apostates are. When Vallāla was a sympathiser of Buddhism, Ballabha advanced him money for his warfare. But with the change of his religion the attitude of Ballabha, his financier, changed. He joined the Pālas of Magadha, gave his daughter in marriage to a Pāla king, and incurred the displeasure of Vallāla. The sacrifice turned the public sympathy in favour of the Rājā and he was not slow in taking advantage of the public feeling. Alone he could not degrade them, he must have Brāhmaṇas with him, and on this occasion he found the Brāhmaṇas fully prepared to co-operate with him, because the banias slighted them, abused them, and wanted to be their rivals.

That at Vallāla's time the caste system in Bengal required re-organization is plain from history. I have elsewhere shown that in Hiounth Sang's time Buddhism was the dominant religion in Bengal, though the heretics were not unknown. Our own tradition shows the Adiĉūra about Hiounth Sang's time saw that the few Brahmins, in Bengal knew nothing of Hinduism. They were perhaps traders as they were in Buddhist countries. He brought Brāhmaṇas and Kāyasthas to Bengal. They increased and multiplied for centuries and included old Brahminists and some converts, for in a mixed community such conversions are frequent and the Hindu society looked tolerably big. The Brāhmaṇas and Kāyasthas formed the backbone of the society, as the monks and their followers formed the backbone of the Buddhist community. But there was a vast population on whom faith sat rather loose. The Brāhmaṇas could not go beyond the Ćudras. The aborigines were outside their operation, but the Buddhist had no such scruples. They took in their fold all who came, so a re-organization was necessary in

Vallāla's time. He degraded the Banias and raised the Kaivarttas. The castes below Çūdras were called Antyajās. If they offered a glass of water to a good Brāhmaṇa he is bound to reject it. They were semi-Buddhists. The Buddhist monks, however, claimed them as theirs, as they do everywhere. The Brāhmaṇas claimed as theirs. But these Kaivarttas were very influential. I read a paper some time ago, in which I tried to show that about fifty years before Vallāla, about the year 1080 A.D. they drove away the Pāla kings from North Bengal and set up Bhima Divoka as their king. They killed a Pāla king, and imprisoned another. But at last Ramapāla defeated them, and broke their power. They were smarting under this discomfiture when Vallāla from Western Bengal invaded North Bengal and conquered it from the Pālas. East Bengal too fell into his hands with its capital Ramapāla. From the terms in which Vallāla speaks of these Kaivarttas he seems to have derived much benefit, from them. He was anxious that they should get some recognized position in Hindu society. They helped him in finding out his son Lakṣmāna, when that Prince fled away before the anger of a stepmother, and he told them "Gacchadhvam Vyavahāryyātām" that is be a clean caste among the Hindus and at the same time he changed their occupation. They were fishermen and boatswains, but he made them agriculturists also. Their anxiety to serve the Brahmanas and others has already been adverted to.

By inducing them to accept domestic service, and by inducing their leaders to accept high State appointments in a quarter away from the centre of their influence, Vallāla freed North Bengal from the turbulence of these restless people. Daśinaghātā of Vallāla is the same as Maṇḍalaghātā of the present day, where Kaivarttas form the bulk of the population and the majority of the upper classes. The name seems to have changed from Daśinaghātā to Maṇḍalaghātā, because the Kaivartta chief, Maheṣa was created a Mahāmāṇḍalika, the great Maṇḍala.

The other castes made clean by Vallāla, as mentioned by Çaraṇa were Mālākāra, Kumbhakāra and Karmāra. These are never regarded as Antyajās, so their incorporation means a re-conversion into Brahmanism. Vallāla gave high offices of State even to low-caste men. He made a Kaivartta a Mahāmāṇḍalika. A Napita a Mahattara, or noble man.

So far the information is received from Vallāla's contemporary, Çaraṇa. At the end of the book, however, Ananda Bhaṭṭa on his own authority gives a few verses of what is termed the Appendix to the Vallālacarita. These, when translated, run thus :—

"From Brāhmaṇa in Kṣatriya girls were born Chettri, who are also called Rājaputra. The Sonār banias have become Vrātya or degraded for loss of the holy thread. Gopa (cowherd), māli (makers of

flower garlands), Tāmboli (betel-sellers), Kapsāras (workers in bell-metal), Tānti (weavers), Čāṅkhika (workers in conch-shell) Kulāla (potters), Karmakāras (blacksmiths), Nāpita (barbers), are Navasāy-akas (nine arrows). Tailika (the oilman), Gandhika (spice and incense vendor), and Vaidyas are clean Čūdras. Of all the Sat-Čūdras, the Kāyastha is declared to be the best."

This is addressed by Ananda Bhaṭṭa to the Rājā of Navadvīpa to whom he dedicates Vallācarita. So this relates to the state of things as existed in 1510, and it is not very different from the state of things to-day.

There is, however, another chapter on the caste system in the work given on the authority of Vyāsapurāṇa by Siṃhagiri, who converted Vallāla to Čaivism. But I reserve the examination of that chapter for my next paper.

LIBRARY.

The following additions have been made to the Library from 6th December, 1900 to 31st December, 1901.

TRANSACTIONS, PROCEEDINGS AND JOURNALS.

Allahabad. Ind. Forester, Jan.-Dec., 1901.

Angers. Soc. d'Etudes Scient., Bull., T. XXIX.

Amsterdam. K. Akad. Wetensch., Jaarb., 1899; Proc., Vol. II; Verhandl., 1^o Sectie, Dl. VII, Nos. 1-5., 2^o, VII, 1-3; Afd. Letterk., N. R., Dl. II, No. 3; Versl., Afd. Letterk., 4^{de} Reeks, Dl. III; Afd. Natuurk., Dl. VIII.

Baltimore. Johns Hopkins Hosp., Bull., Vols. VII, Nos. 58-69., VII 70-81., IX, 82-93., X, 94-105., XI, 106-117., XII, 118-126; Johns Hopkins Univ., Circulars., Vol. XX, Nos. 150-153; Register, 1899-1900.

Batavia. Genootsch. Kunst en Wetensch., Notulen, Dl. XXXVIII, Nos. 2-4., XXXIX, 1-2; Tijdschr. Ind., Dl. XLIII, Nos. 1-6. XLIV, 1-6.

Bellary. Astrol. Mag., Vol. V, Nos. 1, 3, 4, 6-9, 11.

Berlin. Arch. f. pathol. Anat., Bd. CLXIII, Nos. 2-3., CLXIV, 1-3., CLXV, 1; Deutsche Litteraturzeitung, Bd. XXI, Nos. 38-52., XXII, 1-27; Entom. Zeitschr., Nos. 3-4, 1900., 1-3, 1901; Journ. für Math., Bd. CXXII, Nos. 4., CXXIII, 1-4; K. Preuss. Akad. Wissensch., Abhandl., 1899-1900; Sitzb., Nos. 39-53, 1900., 1-38, 1901; Labor. et Mus., No. 2, 1901; Orient. Bibliographie, Vols.

- XIII, Nos. 2., XIV, 1; Sem. f. Orient. Sprachen.; Mittheil., Bd. I-IV; Zeitschr. für Ethnol., Nos. 4-6, 1900., 1-3, 1901.
- Birmingham. Nat. Hist. and Philos. Soc., Proc., Vols. X, Pts. 1-2., XI, 1; Rec. Meteor. Observations, 1896-97.
- Bombay. Anthropol. Soc., Journ., Vol. V, Nos. 4-5, 7; Bombay Br. Roy. Asiat. Soc., Journ., Vol. XX, No. 56; Ind. Antiquary, Dec., 1900., Jan.-Oct., 1901; Nat. Hist. Soc., Journ., Vol. XIII, No. 5.
- Bordeaux. Soc. Linn., Actes, T. LIV.
- Boston. Soc. Nat. Hist., Mem., Vol. V, Nos. 6-7; Occ. Papers, No. 4; Proc., Vol. XXIX, Nos. 9-14.
- Brisbane. Agri. Journ., Dec., 1900., Jan.-Nov., 1901; Depart. Agri., Rep., 1899-1900; Queensland Mus., Ann., No. 5; Roy. Soc., Proc., Vol. XVI.
- Brunswick. Jahresber. f. Chem. u. s. w., Nos. 7, 1892., 8, 1893. 4-8, 1896., 1-8, 1897; Ver. für Naturw., Jahresb., 1891-92 und 1892-93.
- Brussels. Mus. du Congo, Ann., Bot., 1^e Sér., T. I, Nos. 7., 3^e I, 1; Zool., 1^e Sér., T. I, Nos. 6., II, 1; l'Etat Indépendant du Congo, Pub., Nos. 1-11; Soc. Entom., Ann., T. XLIV; Soc. Roy. Sci., Mem., 3^e Sér., T. III.
- Buenos Aires. Acad. Nac. de Ciencias, Bol., T. XVI, Nos. 2-4; Mus. Nac., Comunic., T. I, Nos. 8-9.
- Budapest. Acad. Hongr. Sci., Rep., 1899; Aquila, Bd. VII; Magr. Tud. Akad., Ert. a nyelv-es szept. Köreböl, K. XVII, Nos. 3-5; Nyelvtud. Közlemenyek, K. XXIX, Nos. 3-4., XXX, 1-2; Math. und Naturw. Berichte aus Ungarn, Bd. XVI; Soc. Hongr Geogr., Bull., T. XXVII, Nos. 1-10.
- Calcutta. Bot. Surv. Ind., Rec., Vol. I, No. 13; Agri. Horti. Soc. Ind. Proc. and Journ., Jan.-June, 1901; Agri. Ledger, Nos. 13, 1899. 19-24, 1900., 1-12, 1901; Calcutta Br. Inst. Elect. Engr., Journ. Vol. I, Nos. 1-3; Calcutta Rev., Jan.-Oct., 1901; Epig. Indica, Vol. VI, Pts. 3-6; Geol. Sur. Ind., Genl. Rep., 1900-1901; Mem., Vols. XXIX, XXX, Pts. 1-4., XXXI, 1-3., XXXII, 1-2., XXXIII, 1-2., XXXIV, 1; Palæontologia Indica, Ser. IX, Vols. III, Pts. 3., New Series, I, 3; Ind. and Eastern Engr., Dec., 1900., Jan.-Dec., 1901; Ind. Engineering, Vol. XXX, Nos. 1-26; Ind. Lancet, Vols. XVII, Nos. 1-25., XVIII, 1-11, 13, 15-27; Ind. Meteor. Mem., Vol. XI, Pt. 3; Ind. Weather Rev., Ann. Sum., 1900; Mahabodhi Soc., Journ., Jan.-Nov., 1901; Monthly Weather Rev., Aug.-Dec., 1900., Jan.-July, 1901; Photo. Soc. Ind., Journ., Jan.-Dec., 1901; Wealth of India, Vol. VIII, Pts. 7-12.
- Caen. Soc. Linn., Bull., 5^e Sér., T. III; Mem., 2^e Sér., T. IV, Nos. 1-2.

- Cape Town. S. Afr. Mus., Ann., Vol. II, Pts. 4-5; S. Afr. Philos. Soc., Trans., Vols. XI, Pts. 2-3., XII.
- Cassel. Bot. Centralbl., Nos. 38-52, 1900., 1-33, 1901; General-register, Bd. I-LX; Beihefte, Bd. IX, Nos. 6-7., X, 1-7.
- Chicago. Field Columbian Mus., Pub., Nos. 46-49; Journ. Geol., Nov.-Dec., 1900., Jan.-Nov., 1901.
- Christiania. Vid. Selsk., Forhandl., 1900; Skrifter, Nos. 1-5, 1900.
- Colombo. Ceylon Br. Roy. Asiat. Soc., Journ., Vol. XVI, Nos. 50-51.
- Copenhagen. Nord. Oldk. og. Hist., Aarb., Bd. XV, Nos. 3-4.
- Dorpat. Naturf. Gesellsch., Sitz., Bd. XII, No. 2.
- Dresden. Entom. Zeitschr., Bd. XIII, Nos. 2., XIV, 1.
- Dublin. Roy. Irish Acad., Proc., 3rd Series, Vol. V, Nos. 1-3; Trans., Vol. XXXI, Pts. 8-11.
- Edinburgh. Roy. Phy. Soc., Proc., Session 1899-1900.
- Florence. Arch. per l'Antrop. e la Etnol., T. XXX, Nos. 1-3.
- Frankfurt, a. M. Senkenb. Naturf. Gesellsch., Abhandl., Bd. XX, Nos. 2., XXI, 4., XXVI, 1, 3; Ber., 1899, 1901.
- Frankfurt, a. O. Naturw. Ver. für Reg. Bez., Helios, Bd. XVIII; Societatum Litteræ, Jan.-Dec., 1900.
- Genoa. Mus. Civ. Stor. Nat., Ann., 2^e Sér., T. XX; General Index, Vols. I-XL.
- Geneva. Archiv. Sci. Phys. et Nat., Dec., 1900., Jan.-Nov., 1901.
- Göttingen. Kgl. Gesellsch. Wissensch., Gött. Gel. Anz., June-Dec., 1900; Jan.-June, 1901; Nachrichten, Geschäftl. Mittheil., No. 2, 1900; Math.-Phys. Klasse, Nos. 2-4., 1900; Philolog.-histor. Klasse Nos. 1-3, 1900.
- Graz. Naturw. Ver., Mittheil., 1900.
- The Hague. K. Inst. v. T. L. en Vk., Bijdragen, 6^e Volgr., Dl. VIII, Nos. 1-4., IX, 1-2; Register, Dl. I-L; Nat. Tijdschr. voor Ned. Ind., Dl. LX; Tijdschr. v. Entom., Dl. XLIII, Nos. 3-4., XLIV, 1-2.
- Halifax. N. S. Inst. Sci., Proc. and Trans., Vol. X, Pt. 2.
- Halle. Kaiserl. Leop.-Carol. Akad., Abhandl., Bd. LXXII, LXXIV; Katalog, No. 9; Repertorium, Bd. II, No. 2.
- Hamilton. Hamilton Assoc., Journ. and Proc., Nos. 16-17.
- Hanoi. Ecole Française, Bull., T. I, Nos. 2-3.
- Havre. Soc. Geogr. Com., Bull., T. XVII, Nos. 2-4., XVIII, 1-2.
- Helsingfors. Finska Vetensk-Soc., Bidrag, Bd. LIX-LX; Förhandl., Bd. XLII; Söb. p. Fau. et Fl. Fenn., Acta, T. XVI-XIX; Meddel. Nos. 24-26; Soc. Finno-Ougrienne, Journ., Bd. XIX; Mem., Bd. XVI; Soc. Sci. Fenn., Acta, T. XXVI-XXVII.
- Honolulu. Bernice Pauahi Bishop Mus., Fauna Hawaiiensis, Vol. II, Pt. 4; Occ. Papers, Vol. I, No. 2.

Indianapolis. Acad. Sci., Proc., 1898-99.

Ithaca. Cornell Univ., Studies, Nos. 13-14.

Jena. Centralbl. f. Bakter. etc., Bd. XIX-XXIII, XXV-XXIX, XXX, Nos. 1-4.

Königsberg. Phy.-ökonom. Gesellsch., Schriften, 1900.

Lawrence, Kansas. Univ. Quart., Vol. IX, Nos. 1-2.

Leipzig. Ann. d. Phys. u. Chem., Nos. 12, 1900., 1-12, 1901; Beibl., Nos. 10-12, 1900., 1-12, 1901; Deutsche Morgenländ. Gesellsch., Zeitschr., Bd. LIV, Nos. 1., LV, 1-4; Literarisches Centralbl., Nos. 51-52, 1900., 1-32, 37-52, 1901; Kgl. Sächs. Gesellsch., Abhandl., Phil.-hist. cl., Bd. XX, Nos. 3-7., XXI, 1; Verhandl., Math.-phys. Cl., Nos. 6-7, 1900., 2-3, 1901; Phil.-Hist. Cl., Nos. 9, 1900., 1, 1901; Zeitschr. f. Hygiene, Bd. XXI-XXXVI.

Leyden. Int. Arch. für Ethn., Bd. XIII, Nos. 4-6., XIV, 1-2, Supp., Bd XIII.

Liège. Soc. Geol., Ann., T. XXV, Nos. 1., XXVII, 4., XXVIII, 1-3.

Liverpool. Lit. Philos. Soc., Pro., No. 54.

London. Academy, Nos. 1493-1545; Ann. Mag. Nat. Hist., Sept.-Dec., 1900., Jan.-Aug., 1901; Anthropol. Inst., Journ., Jan-Dec., 1900. Jan-June, 1901; Asiat. Quart. Rev., 3rd Sér., Vols. X, Nos. 20., XI, 21-22., XII, 23; Athenæum, Nos. 3816-3868; Chem. News, Vols. LXXXII, Nos. 2130-2144., LXXXIII, 2145-2176; Empire Rev., Vol. I, No. 1; Entom., Oct.-Dec., 1900., Jan.-Aug., 1901; Entom. Monthly Mag., Oct.-Dec., 1900., Jan.-Aug., 1901; Geol. Soc., Geol. Literature, No. 7; Member-List, 1901; Quart. Journ., Vol. LVII, Pts. 1-3; Ibis, 7th Ser., Vols. VI, Nos. 24., 8th Ser., I, 1-3; Inst. Civil Engr., Member-List, 1900; Proc., Vols. CXXI-CXLIV; Subject-Index, Vols. CXIX-CXLII; Inst. Elect. Engr., Journ., Vol. XXX, Nos. 147-52; Member-List, 1901; Inst. Mech. Engr., Member-List, 1901; Proc., Nos. 2-4, 1900., 1-2, 1901; Jenner Inst. Prev. Med., Trans., Series I-II. Journ. Bot., Oct.-Dec., 1900., Jan.-Aug., 1901; Journ. Conch., Vols. IX, Nos. 12., X, 1-3; Journ. Physiol., Vol. XXVII, Nos. 1-2; Linn. Soc., Journ., Bot., Vol. XXXV, Nos. 242-243; Zool., Vol. XXVIII, Nos. 181-183; Member-List, 1900-1901 and 1901-1902; Proc., Nov.-Dec., 1900., Jan.-Dec., 1901; Trans., Bot., 2nd Ser., Vols. V, Pts. 13-15., VI, I; Zool., 2nd Ser., Vol. VIII, Pts. 1-4; Mess. Math., Aug.-Dec., 1900., Jan.-Apr., 1901; Nature, Vols. LXIII, Nos. 1624-1676., LXIV, 1644-1676; Notes and Queries 9th Ser., Vols. VI, Nos. 143-157., VII, 158-183., VIII, 184-189; Numism. Chron., Pts. 3-4, 1900., 1-2, 1901; Numism. Circ., Dec., 1900., Jan.-Dec., 1901; Path. Soc., Trans., Vol. LII, Pts. 1-2; Phil. Mag., Oct.-Dec., 1900., Jan.-Aug.,

- 1901; Quart. Journ. Math., Vol. XXXII, Nos. 2-4; Quart. Journ. Micr. Sci., New Series, Vols. XLIII, Pts. 4, XLIV, 1-2; Roy. Asiat. Soc., Journ., Pts. 1-4, 1901; Roy. Astron. Soc., Monthly Notices, Vols. LXI, Nos. 1-9, with App., 1-8, LXII, 1; Roy. Geogr. Soc., Journ., Jan.-Dec., 1901; Roy. Inst., Proc., Vol. XVI, Pts. 1-2; Roy. Micro. Soc., Journ., Pts. 5-6, 1900, 1-3, 1901; Roy. Soc., Member-List, 1899; Phil. Trans., Vols. CXCIB, CXCII A and B, CXCHIA and B, CXCIV A, CXCV A, CXCVI A; Proc., Vols. LXVII, Nos. 435-441, LXVIII, 442-448; Year-Book, 1901; Roy. Stat. Soc., Journ., Vols. LXIII, Pts. 3-4, XLIV, 1-2; Smith Rhopalocera Exotica, Pts. 55-56; Zool. Soc., Proc., Nov.-Dec., 1900, Jan.-Jun., 1901; Trans., Vols. XV, Pts. 5-7, XVI, 1-3.
- Lyons. Mus. Hist. Nat., Arch., T. VII; Soc. Agri., Ann., 1897-98.
- Madison. Wiss. Acad. Sci., Trans., Vol. XII, Pt. 2.
- Madras. Agri.-Hort. Soc., Proc., Oct.-Dec., 1899, Jan.-Mar., 1900; Rep., 1899, Brit. Med. Assoc., Trans., Vol. IX, Nos. 1-2; Govt. Mus., Bull., Vols. III, Nos. 3, IV, 1; Ind. Journ. Education, Nov., 1900, Feb., 1901.
- Manchester. Lit. Philos. Soc., Mem. and Proc., Vols. XLV, Pts. 1-4, XLVI, 1.
- Melbourne. Australasian Assoc., Rep., 1900; Roy. Soc., Proc., New Series, Vols. XIII, Pts. 2, XIV, 1.
- Mexico. Inst. Geol., Bol., No. 14; Soc. Alzate, Mem., T. XIV, Nos. 7-12, XV, 1-2.
- Moscow. Soc. Imp. Nat., Bull., Nos. 1-4, 1900, 1-2, 1901.
- Munich. K. b. Akad. Wissensch., Abhandl., Math.-Phys. Cl., Bd. XX, Nos. 1-2, XXI, 1.
- Nantes. Soc. Sci. Nat. Ouest, Bull., Nos. 1, 4, 1900, 1-3, 1901.
- New Haven. Amer. Journ. Sci., Oct.-Dec., 1900, Jan.-Aug., 1901; Index to Vols. I-X; Amer. Orient. Soc., Journ., Vols. XXI, Nos. 2, XXII, 1; Conn. Acad. Sci., Trans., Vol. X, Pt. 2; Yale Rev., Vols. IX, Nos. 3-4, X, 1-3; Yale Univ., Cat., 1900-1901; Librn. Rep., Jan. 1899 to July 1900; Rep., 1900-1901; Stud. in English, Nos. 9-10.
- New York. Amer. Mus. Nat. Hist., Bull., Vol. XI, Pt. 3.
- Nürnberg. Naturh. Ges., Abhandl., Bd. XIII.
- Ottawa. Geol. Sur., Rep., Vol. XI, with maps; Lit. Sci. Soc., Trans., No. 2; Roy. Soc., Proc. and Trans., 2nd Series, Vol. V.
- Paris. Acad. Nat. Sci., Actes, 1897; Acad. Sci., C. R., T. CXXXI, Nos. 10-27, CXXXII, 1-25, CXXXIII, 1-6; Ann. de Chim. et de Phys., Oct.-Dec., 1900, Jan.-Aug., 1901; Inst. Pasteur, Ann., T. XI-XIV, XV, Nos. 2-9; Journ. Asiat., Sept.-Dec., 1900, Jan.-

- Apr., 1901; Journ. des Savants, July-Dec., 1900., Jan.-July, 1901; Mus. Guimet, Ann., T. XXVI, Pt. 4; Bib. d'Etudes, T. VIII-IX; Rev. Hist. Rel., Nos. 5-6, 1898., 6, 1899., 1-6, 1900., 1, 1901; Mus. Hist. Nat., Archiv., 3^e Sér., T. X, Nos. 1-2., 4th Sér., I, 1-2, II, I; Bull., Nos. 7-8, 1898., 1-8, 1899., 1-8, 1900; Rev. Crit., T. L, Nos. 35-53., LI, 1-7, 9, 11-18, 20-31; Rev. Scient., 4^e Sér., T. XIV, Nos. 11-14, 17-26., XV, 1-26., XVI, 1-6; Soc. d'Anthropol., Bull., Nos. 6, 1898., 1, 4-6, 1899., 1-4, 1900; Table Générale, 1860-1899; Soc. Geogr., La Géogr., Dec. 1900., Jan-Novr., 1901; Soc. Philom., Bull., 9^e Sér., T. II, Nos. 3-4., III, 1-2; Soc. Zool., Bull., T. XXV; Mem., T. XIII.
- Philadelphia. Acad. Nat. Sci., Journ., 2nd Series, Vol. XI, Pt. 3; Proc., Mar.-Aug., 1900; Amer. Acad., Ann., Vols. XVII, Nos. 2-3., Supp., Nos. 1 and 3., XVIII, 1-3; Amer. Philos. Soc., Mem., Vol. I; Proc., Vol., XXXIX, Nos. 162-164; Franklin Inst., Journ., Dec., 1900., Jan.-Nov., 1901; Manual of Conch., Pts. 43-53; Pennsylvania Univ., Catalogue, 1900-1901; Rep., 1899-1900.
- Pisa. Soc. Tosc. Sci. Nat., Mem., T. XVII; Processi Ver., T. XII, pp. 75-230.
- Prague. K. K. Sternwarte, Mag. Meteorol. Beobach., 1900.
- Rio de Janeiro. Observatorio do Rio de Janeiro, Anuario, 1900; Bol. Mensal, Oct.-Dec., 1900.
- Rome. R. Acad. dei Lincei, Atti Rendiconti, Cl. di. Sc. Fis. Math. Nat., 5^e Ser., 1^o Sem., T. X, Nos. 1-12., 2^o Sem., X, 1-10; Cl. di. Sc. Mor. Stor. e Fil., 5^e Ser., T. IX, Nos. 7-8; Rendiconto dell. adunanza solenne del 2 giugno 1901; Soc. Romana di Anthropol., Atti, T. VII, Nos. 3., VIII, 1; Soc. Spettr. Ital., Mem., T. XXIX, Nos. 7-12., XXX, 1-12.
- Seoul. Korea Br. Roy. Asiat. Soc., Trans., Vol. I.
- Shanghai. China Br. Roy. Asiat. Soc., Journ., Vol. XXXII.
- Simla. U. S. Inst. Ind., Journ., Vol. XXX, Nos. 142-145.
- Singapore. Straits Br. Roy. Asiat. Soc., Journ., Nos. 35-36.
- Springfield, Ill. Newberry Lib., Rep., 1900; State Labor. Nat. Hist., Bull., Vol. V, Nos. 11-12.
- St. Louis. Acad. Sci., Trans., Vols. IX, Nos. 6, 8-9., X, 1-8.
- St. Petersburg. Acad. Imp. Sci., Ann. Mus. Zool., T. V, Nos. 3-4., VI, I; Bull., V^e Sér., T. X, Nos. 5., XI, 1-5., XII, 1; Mem., Cl. Phys. Math., VIII Sér., T. VIII, Nos. 6-10., IX, 1-9., X, 1-6; Cl. Hist. Phil., VIII^e Sér., T. III, Nos. 6., IV, 1-8; Procès-Verbaux, T. II-III; Comité Geol., Bib. Geol., 1897; Bull., T. XIX, Nos. 1-10., XX, 1-6; Mem., T. XIII, Nos. 3., XVIII, 1-2; Horti. Petrop., Acta, T. XVI, XVIII, Nos. 1-3; Russ. Imp. Geogr. Soc., Journ., 1900., Proc., Vols. XXXVI, Nos. 3-6., XXXVII, 1-3; Russ.

- Kaiserl. Mineral. Gesellsch., *Mater. Geol. Russ.* Bd. XX; *Verhandl.* 2^e Sér., Bd. XXXVIII, No. 2.
- Stettin. *Entomol. Zeit.*, Bd. LXII, Nos. 1-12.
- Stockholm. *Entomol. Tidskr.*, Bd. XXI, Nos. 1-4; *Kongl. Vetensk. Akad., Meteor. Iaktt.*, 1895; *Ofversigt*, 1900; *Kongl. Vitterhets Historie och Antiquitets Akad., Manadsblad*, 1896, 1900; *Sveriges Offentliga Bib., Accessions-Katalog*, No. 14, 1899.
- Stuttgart. *Ver. vaterl. Naturk., Jahres.*, Bd. LVII.
- Sydney. *Linn. Soc., Proc.*, Pts. 3-4, 1900., 1, 1901; *Roy. Soc., Journ. and Proc.*, Vol. XXXIV; *Sci.*, Nov.-Dec., 1900., Jan.-Nov., 1901.
- Taiping. *Perak Govt. Gaz.*, Vols. XIII, Nos. 38-43., XIV, 1-37.
- Tokyo. *Deutsche Gesellsch. für Natur-und Völkerk. Ost.*, Mittheil., Bd. VIII, No. 2; *Imp. Univ., Calendar*, 1900-1901; *Mittheil. des Med. Fac.*, Bd. IV, Nos. 7., V, 1; *Journ. Coll. Sci.*, Vols. XIII, Pts. 4., XIV, 1-3.
- Toronto. *Canadian Inst., Proc.*, New Series, Vol. II, Pt. 4; *Trans.*, Vol. VII, Pt. 1.
- Tring. *Novitates Zool.*, Vols. VII, No. 4., VIII, 1-3.
- Turin. *R. Acad. Sci., Atti.*, T. XXXVI, Nos. 1-15; *Mem.*, 2^e Ser., T. L.; *Osserv. Meteor.*, 1900.
- Upsala. *Geol. Inst., Bull.*, Vol. V, Pt. 1; *Upsala Univ., Arsskrift*, 1899-1900.
- Valparaiso. *Deutscher Wissensch. Ver., Verhandl.*, Bd. IV, Nos. 3-4.
- Vienna. *Anthropol. Gesellsch., Mittheil.*, Bd. XXIX, Nos. 4, 6., XXX, 1-3; *K. Akad. Wissensch., Almanach*, 1899, 1901; *Archiv f. Österr. Gesch.*, Bd. LXXXVII, Nos. 1-2., LXXXVIII, 1-2., LXXXIX, 1; *Denkschr., Mathem.-Naturw. Cl.*, Bd. LXVI, No. 3., LXVIII; *Phil.-Hist. Cl.*, Bd. XLVI; *Fontes, Abth. II.*, Bd. XLVIII, No. 2., XLIX, 2; *Sitzb., Mathem.-Naturw. Cl., Abth. I.*, Bd. CVIII, Nos. 1-10., CIX, 1-6; *Abth. II A*, Bd. CVIII, Nos. 1-10., CIX, 1-7; *Abth. II B*, Bd. CVIII, Nos. 1-10., CIX, 1-7; *Abth. III*, Bd. CVIII, Nos. 1-10., CIX, 1-7; *Mathem.-physik. Cl.*, Nos. 1, 1900., 1-3, 1901; *Index*, 1886-1899; *Phil.-hist. Cl.*, Bd. CXXI-CXXII; *Register*, CXXXI-CXL; *K. K. Geol. Reich., Jahrb.*, Bd. XLIX, No. 4; *Verhandl.*, Nos. 13-18, 1900., 1-9, 1901; *K. K. Naturh. Hofmus., Ann.*, Bd. XIV, Nos. 1-4., XV, 1. *K. K. Zool. Botan. Gesellsch., Verhandl.*, Bd. L, Nos. 9-10., LI, 1-8.
- Washington. *Acad. Sci., Proc.*, Vols. II. pp. 341-694., III, 1-568; *Biol. Soc., Proc.*, Vols. XIII, pp. 185-208., XIV, 1-180; *Smithson. Inst., Rep.*, 1898; *U. S. Dept. Labor, Bull.*, No. 20; *U. S. Dept. Agri., Bull.*, No. 14; *North Amer. Fauna*, Nos. 16, 20-21; *Rep.*, 1900; *Year-Book*, 1900; *U. S. Geol. Surv., Bull.*, Nos. 150-162; *U. S. Nat. Mus., Bull.*, No. 47, Pt. 4; *Rep.*, 1898; *Special Bull.*, Pt. I.

- Wellington. New Zealand Inst., Trans. and Proc., 1900; Polynes. Soc., Journ., Vols. IX, Nos. 4., X, 1-3.
 Yokohama. Asiat. Soc., Trans., Vol. XXVIII.
 Zagreb. Hrv. Arh.Drustva, Vjesnik, Bd. V.

BOOKS AND PAMPHLETS.

- ABDUL WALI, MAULAVI. On Curious Tenets and Practices of a certain class of Faqirs in Bengal. 1901.
 Aberdeen University. Place Names of West Aberdeenshire. 1900, Records of Old Aberdeen. 1157-1891. Vol. I; Roll of Alumni in Arts of the University and King's College of Aberdeen. 1596-1860. Anecdota Oxoniensia. Semitic Series. Part X.
 Archaeological Survey Reports: India, New Imperial Series. Nos. XX, XXIV, XXVI and XXX; N.-W.P. and Oudh, 1900-1901; Madras. 1900-1901; Western India. 1899-1900 and 1900-1901.
 Army List (India) January to November 1901.
 BARUA, HEMCHANDRA. Hema Kosha or an Etymological Dictionary of the Assamese Language. Edited by Captain P. R. Gurdon and Hemchandra Gosain. 1900.
 Bengal Chemical Examiner's Department. Report. 1900.
 Bernice Pauahi Bishop Museum. Key to the Birds of the Hawaiian Group. 1901.
 Bhopal Educational Reform Committee. Proceedings. 1901.
 Bibliography of Bengal. 1901. (Issued by the Office of Inspector-General of Civil Hospitals in Bengal).
 BLANFORD, W. T. The Fauna of British India including Ceylon and Burma. Arachnida. By R. I. Pocock. 1900.
 BLOOMFIELD, M. The Myth of Purūravas, Urbaci, and Ayu. 1899; On reiçama, an epithet of Indra. 1900; On the Relative Chronology of the Vedic Hymns. 1900; On the Wedding Stanza, Rig-Veda, X, 40-10; Proposed reproduction of the Kashmirian Atharva-Veda. 1899. (pamphlets).
 BOELL, PAUL. L'Inde et le problème indien. 1901.
 BOERLAGE, DR. J. G. Handleiding tot de Kennis der Flora van Nederlandsch Indië. Deel III, 1^e Stuk.
 Bombay Government Observatory. Magnetical, Meteorological and Seismological Observations. 1898 and 1899.
 Botanic Garden, Calcutta. Annals. Vol. IX.
 Botanical Survey of India. Report. 1900-1901.
 BRANDES, J. Beschrijving der Javaansche, Balineesche en Sasaksche Handschriften. 1^e Stuk.
 British Association. Report. 1900.

- British Museum. Catalogue of the Hebrew and Samaritan Manuscripts. Part I; Catalogue of the Mesozoic Plants. Part III; Catalogue of Welwitsch's African Plants. Part IV, and Vol. II, Part 2 Hand-List of Birds. Vol. II.
- BROWN, E. H. Cholera and its treatment by preventive inoculation in the Darbhanga Jail. 1896.
- BUCKLAND, C. E. Bengal under the Lieutenant-Governors. Vols. I-II. 1901.
- BUCKTON, G. B. Monograph of the Membracidae. Parts I-II.
- BÜHLER, GEORG., and KIELHORN, F. Grundriss der indo-arischen Philologie und Altertumskunde. Band I, Heft 8-9.
- Bureau of American Ethnology, Washington. Report. 1895-96, Part 2
- BURGESS, JAS. Buddhist Art in India. 1901.
- Cambridge University. Report of the Library Syndicate. 1900.
- CAMPBELL, FRANK. Index-Catalogue of Indian Official Publications in the Library, British Museum.
- Census of India, 1901. Index of Languages.
- Charaka-Samhita. Translation. Parts 20-24.
- CHATTOPADHYAYA, AGHORECHANDRA. The Original Abode of the Indo-European or Arya Races. 1901.
- CHINTAMANI, C. Y. Indian Social Reform. 1901.
- CHOATE, J. H. Address on Abraham Lincoln. 1900.
- CHRISTIAN, J. Behar Proverbs. 1891.
- CHURCHILL, MAJOR A. B. N. Short notes on the History of Fort William. 1901.
- Civil Lists:—Assam, January-October, 1901; Bengal, January-October, 1901; Burma, January-October, 1901; Coorg, January-July, 1901; Hyderabad Administration, January-October, 1901; India, January-July, 1901; Mysore, January-July, 1901; North-Western Provinces and Oudh, January-October, 1901; Punjab, January-October, 1901; Sind, January-July, 1901.
- COLEBROOK, R. H. Twelve views of the Palaces in the Kingdom of Mysore. 1793.
- COTES, E. C. Locusts of North-Western India. 1890; Second Note on Locusts in India. 1890.
- CURZON, HON. GEORGE N. Justinian. 1883.
- Dagh Register gehouden int Casteel Batavia vant passerende daer ter plaetse als over geheel Nederlandts—India. Anno 1641-1642.
- DANIEL, T. Antiquities of India. 1799; Hindoo Excavations in the Mountain of Ellora near Aurungabad in the Deccan. 1803.
- EITEL, REV. DR. China and the Far Eastern Question. 1900.
- ELIOT, JOHN. Hand-book of Cyclonic Storms in the Bay of Bengal 2nd edition. Vols. I-II.

- FINDEN, E. W., and HOGARTH, J. The Royal Gallery of British Arts.
 FOSTER, W. Letters received by the East India Company. Vol. V.
 1901.
- FOUCHER, A. Etude sur l'iconographie bouddhique de l'Inde, etc. 1900.
- FRANCIS, C. R. Sketches of Native life in India. 1848.
- FREDUNBEG, MIRZA KALICHBEG. The Ohachnamah, an Ancient History
 of Sind. 1900.
- GREEN, J. Causes of the War in South Africa. 2nd edition. 1900.
- Greenwich Observatory. Magnetical and Meteorological Observations.
 1898.
- HAFKINE, W. M. A Discourse on preventive inoculation. 1899; The
 Health of the inoculated. 1901; Report of the Dharwar inocula-
 tion investigation Committee. 1901.
- HAYEM, G. Du Sang. 1889.
- Horn Scientific Exploring Expedition. Map showing the Explorations
 and Discoveries in South Australia and Western Australia; Map
 showing the route in the Northern Territory of South Australia;
 Topographical Survey of Mount Watt.
- HOWELL, M. S. A Grammar of the Classical Arabic Language. Part I.
 1900.
- HYDE, H. B. Parochial Annals of Bengal. 1901.
- India Office. Catalogue of the Library. Vol. II, Part II.
- Indian Museum. Catalogue of the Indian Decapod Crustacea. Part I.
 By Major A. Alcock; A Descriptive Catalogue of the Indian Deep
 Sea Crustacea Decapoda, Macrura and Anomala. 1901. By Major
 A. Alcock; List of Birds. Part I; Report. Vol. XXXI with
 Index.
- Indiana Department of Geology and Natural Resources. Report. 1900.
- Imperial Library, Calcutta. Press List of ancient documents preserved.
 1757-1758.
- JANET, C. Aiguillon de la *Myrmica rubra*. Appareil de fermeture de
 la glande à venin. 1898; Limites morphologiques des anneaux
 post-céphaliques et musculature des anneaux post-thoraciques chez
 la *Myrmica rubra*. 1897; Réaction alcaline des chambres et
 galeries des nids de Fourmis. Durée de la vie des fourmis déca-
 pitées. 1898; Sur la production des sons chez les fourmis et sur les
 organes qui les produisent. 1893; Sur le mécanisme du vol chez
 les insectes. 1899; Sur les nerfs de l'antenne et les organes
 chordoto-naux chez les fourmis. 1894; Sur les Nématodes des
 glandes pharyngiennes des fourmis (*Pelodera*, sp.) 1893; Sur un
 organe non décrit servant à la fermeture du réservoir du venin,
 et sur le mode de fonctionnement de l'aiguillon chez les fourmis.

- 1898; Sur une cavité du tégument servant, chez les Myrmicinae, à étaler, au contact de l'air, un produit de sécrétion. 1898; Système glandulaire tégumentaire de la *Myrmica rubra*. Observations diverses sur les fourmis. 1898 (pamphlets).
- Kalhana's Chronicle of the Kings of Kāśmīr. Vols. I-II. 1900. Edited by M. A. Stein.
- KERN, H. Ramayana, oudjavaansch helden-dicht. 1900.
- KIELHORN, F. Bruchstücke indischer Schauspiele in Inschriften zu Ajmere. 1901.
- KIRBY, W. F., and WYTSMAN, P. J. Hübner. Exotische Schmetterlinge. Parts 38-40.
- Kodaikanal and Madras Observatories. Report. 1900-1901.
- KONOW, STEN. Rāja-cekharā's Karpūra-mañjarī. 1901.
- KRISHNA, BHALCHANDRA. M. Haffkine's Plague prophylactic inoculation. 1898.
- Linguistic Survey of India. Kuki-Chin Languages. 1901.
- Lucknow Government Horticultural Gardens. Report. 1900-1901.
- Lucknow Provincial Museum. Report. 1900-1901.
- LYMAN, B. S. Notes on Mining Instruments. 1900.
- MACDONELL, A. A. A History of Sanskrit Literature. 1900.
- Madras General Catalogue of Stars. 1835.
- Madras Government Museum. Catalogue of the Prehistoric Antiquities. 1901; Report on the Administration. 1900-1901.
- Mappa do Territorio Portuguez de Goa.
- Marine Survey of India. Administration Report 1899-1900.
- Mauritius Royal Alfred Observatory. Report. 1899-1900; Results of the Magnetical and Meteorological Observations. 1899.
- MEHTA, SHAPURJI M. Report on the effects of inoculation among the Jewish Community at Aden with Haffkine's Anti-plague Vaccine. 1901.
- Meteorological Department of the Government of Bengal. Administration Report. 1900-1901.
- Meteorological Department of the Government of India, Administration Report. 1900-1901.
- Meteorology of the Bombay Presidency. Sketch. 1900-1901.
- MODI, JIVANJI JAMSHEDJI. Cama Memorial Volume. 1900.
- Monograph on Ivory Carving in the Punjab. 1900.
- MORGAN, C. L. Animal Behaviour. 1900.
- MURDOCH, DR. J. Government the Ryot's Banker *versus* Agricultura Banks. 1901.
- Mysore Archæological Series. Epigraphia Carnatica. Vol. VI.
- Mysore Geological Department. Records. Vol. I; Report of the Chief Inspector of Mines, 1898-1900.

Mysore Meteorological Department. Meteorological Memoirs. No. 1;
Report on the Rain-fall Registration. 1900.

Nagpur Experimental Farm. Report. 1900-1901.

NATU, VISHNU RAGHUNATH. Monograph on the Empire of Vijayanagar
1900.

Orientalische Bibliographie. Nos. 1-2, 1898., 1-2, 1899.

Oxford University Museum. Catalogue of Eastern and Australian
Lepidoptera Heterocera. Parts I-II.

PRAIN, D. Botanical Notes and Papers. 1894-1901.

Pratap Singh Museum of the Jammu and Kashmir State. Preliminary
Note. 1901.

RAMSAY, W. Report on the Indian University of Research.

RECLUS, E. The Universal Geography. Vols. I-IV. Edited by A. H.
Keane.

ROUSE, W. H. D. The Jataka. Vol. IV. 1901.

Routes in the Bengal and Punjab Commands. Revised Edition with
Map. 1900.

Saharanpur and Arnigadh Government Botanical Gardens. Report.
1900-1901.

SARKIS, C. J. Inoculation and Plague operations in Ahmednagar and
District during epidemic of 1899.

SASTREE, YOGESA CHANDRA. A Hand-book of Hindu Pantheism. 1900.

SATOW, SIR E. M. The Voyage of Captain John Saris to Japan. 1613.
(Hakluyt Society). 1900.

Scientific Memoirs by Medical Officers of the Army of India. Part XII.

Search for Sanskrit Manuscripts in the Bombay Circle. Report. 1891-95.

SENART, E. Bouddhisme et Yoga. 1900.

SHARPE, E. M. B. Monograph of the Genus Teracolus. Parts 8-10.

SINGH, RAI RAM ANUGRAH NARAYAN. Brief History of Bodh Gaya Math.
1892.

SMITH, V. A. Asoka. 1901.

STEIN, M. A. Notes on an Archæological Tour in South Bihar and
Hazaribagh. 1901; Preliminary Report on a Journey of Archæo-
logical and Topographical Exploration in Chinese Turkestan. 1901.

Survey of India. General Report. 1899-1900; Professional Paper.
No. 4; Rain-fall at the Trigonometrical Branch Office, Dehra Dun,
1868 to 1899.

Tokyo Earthquake Investigation Committee in Foreign Languages.
Publications. Nos. 3-6.

TUUK, DR. H. N. VAN DER. Kawi-balineesch-Nederlandsch Woorden-
boek. Deel III.

UZEL. Beiträge zur Entwicklungsgeschichte von Campodea staphyli-

nus estw. 1897; Monografie Radu "Thysanoptera." 1895; Studien über die Entwicklung der Apterycoten Insecten. 1898; Supinsky Zeme Ceské. Thysanura Bohemiæ. 1890; Vorläufige Mittheilung über die Entwicklung der Thysanuren. 1897. (pamphlets).

VASU, SRISA CHANDRA. The Ashtadhyayi of Panini. Translation. Parts I-XXXII.

WATERHOUSE, MAJOR-GENERAL J. Notes on the Early History of the Camera Obscura. 1901; The sensitiveness of silver and of some other metals to light. 1900. (pamphlets).

Who's Who. 1901.

WILSON, A. and BONAPARTE, PRINCE C. L. American Ornithology: Vols. I-III. 1876.

Yale University. Rules of the Summer School of Forestry. 1901.

Besides Annual Government Reports on Administration (5); Asylums and Reformatories (3); Customs (1); Education (2); Emigration (2); Excise (1); Famine (3); Forest (1); Jails (2); Legal and Judicial (4); Land Revenue Settlement (2); Municipal (1); Police (3); Private Estates (1); Registration (2); Salt (1); Sanitation (4); Tide (1); Trade and Traffic (8); Vaccination (3); Wrecks and Casualties (4); and 24 Parliamentary Blue books.



PROCEEDINGS

OF THE

ASIATIC SOCIETY OF BENGAL.

FOR FEBRUARY, 1902,

The Annual Meeting of the Society was held on Wednesday, the 5th February, 1902, at 9 P.M.

H. H. SIR JOHN WOODBURN, M.A., K.C.S.I., President, in the chair.

The following members were present:—

Major A. Alcock, I.M.S., Mr. J. Bathgate, The Hon. Mr. C. W. Bolton, C.S.I., Rai Chunilal Bose Bahadur, The Hon. Mr. J. A. Bourdillon, C.S.I., Major W. J. Buchanan, I.M.S., Mr. W. R. Criper, Kumar Satindradeb Rai Mahasai, Mr. F. Finn, The Revd. E. Francotte, S.J., Major C. R. M. Green, I.M.S., Mr. D. Hooper, Mr. W. A. Lee, Mr. J. Macfarlane, Mr. W. C. Macpherson, Kumar Ramessur Maliah, Mr. H. H. Mann, Captain A. F. McArdle, I.M.S., Mr. W. H. Miles, Mr. J. D. Nimmo, Mr. F. E. Pargiter, Mr. H. H. Risley, C.I.E., Captain L. Rogers, I.M.S., Rai Ram Brahma Sanyal Bahadur, Babu Jogeschandra Sastri, Mr. M. J. Seth, Mahamahopadhyaya Haraprasad Shastri, Babu Chandra Narayan Singh, Babu Lakshmi Narayan Singh, Maharaja Prodyat Coomar Tagore, Mr. J. Wyness.

Visitors:—Mr. E. H. S. Clarke, Kumar Kshitindradeb Rai Mahasai, Kumar Manindradeb Rai Mahasai, Babu Jaladhi Chandra Mukerjee, Babu R. M. Vasu.

According to the Rules of the Society, the President ordered the voting papers to be distributed for the election of Officers and Members of Council for 1902 and appointed Major A. Alcock and Mr. J. D. Nimmo to be scrutineers.

The President then called upon the Secretary to read the Annual Report.

ANNUAL REPORT FOR 1901.

The Council of the Society have the honour to submit the following Report on the state of the Society's affairs during the year ending 31st December, 1901.

Member List.

Our number of Ordinary Members is 328, which is higher than in any year since 1885,

Forty-eight Ordinary Members have been elected and we have lost 31, namely, 7 by withdrawal, 7 by death, 6 by removal under Rule 9, 6 by removal under Rule 38, and 5 by removal under Rule 40. The total number of Members at the close of 1901 was 328, against 311 for the preceding year; of these 123 were Residents, 133 Non-Residents, 13 Foreign, 22 Life, 36 Absent from India, and 1 Special Non-Subscribing Member, as will be seen from the following table, which also shows the fluctuations in the numbers of Ordinary Members during the past six years:—

YEAR.	PAYING.				NON-PAYING.				GRAND TOTAL.
	Resident.	Non-Resident.	Foreign.	Total.	Life.	Absent.	Special Non-Subscribing.	Total.	
1896	105	119	11	235	23	35	1	59	294
1897	106	115	9	230	22	35	1	58	288
1898	122	108	11	241	23	35	1	59	300
1899	120	119	13	252	21	27	1	49	301
1900	116	124	18	258	22	30	1	53	311
1901	123	133	13	269	22	36	1	59	328

We have to deplore the death of the following Ordinary Members: Nawab Ashan-ullah Khan Bahadur, The Most Revd. Dr. Paul Goethals, S.J., Surgeon-General R. Harvey, C.B., Dr. A. von Krafft, Babu Shamlal Mullick, Mr. L. de Nicéville, and Mr. G. F. Reader.

Our number of Honorary Members is complete. During the year, on the recommendation of the Council, Professor J. W. Judd, C.B., LL.D., F.R.S., was elected as an Honorary Member in the place of Professor The Right Hon'ble F. Max Müller, deceased.

The lists of Special Honorary Centenary Members, Corresponding Members, and Associate Members continue unaltered from last year, the numbers standing at 4, 1, and 12 respectively.

No Members compounded for their subscription during the year.

Indian Museum.

There was only one change amongst the Trustees, caused by the death of The Most Revd. Dr. Paul Goethals, S.J., Archbishop of Calcutta, and Mr. W. K. Dods has been appointed to fill the vacant place. The other Trustees who represent the Society are Mr. A. Pedler, F.R.S., Dr. Mahendralal Sircar, C.I.E., Mr. G. W. Kuchler, M.A., and Mr. T. H. Holland, F.G.S.

Finance.

The Accounts of the Society are shown in Statement No. 1, in the Appendix, under the usual heads.

Statement No. 8 contains the Balance Sheet of the Society and of the different funds administered through it.

The Budget Estimate for 1901 was taken at the following figures: Receipts Rs. 17,430, Expenditure Rs. 23,326-4 (Ordinary Rs. 16,126-4, Extraordinary Rs. 7,200).

Taking into account only the ordinary items of receipts and expenditure for the year 1901, the actual results have been: Receipts Rs. 17,602-4-6, Expenditure Rs. 11,397-12-5.

The receipts thus show an increase of Rs. 172-4-6, while the expenditure shows a saving of Rs. 4,728-7-7 on the Budget Estimate.

There is an increase in Receipts under the heads of "Subscriptions," "Sale of Publications," and "Government Allowances." Subscriptions were estimated at Rs. 7,000, while the actuals were Rs. 7,995-14, the excess being due to a large number of members being elected during the last year. Owing to heavy purchases of the Society's publications by Messrs. Thacker, Spink and Co., "Sale of Publications" has exceeded by Rs. 279-3-8. A further grant of Rs. 1,000 by the Government of India towards carrying on the work of the International Catalogue of Scientific Literature having been received, there is thus an increase of Rs. 1,000 under the head "Government Allowances."

The difference between the estimated and actual receipts under the head "Interest on Investments" is due to the interest for the second half of 1901 being credited by the Bank of Bengal on 2nd January 1902 instead of 31st December 1901. The heading "Miscellaneous" shows a very slight decrease.

On the Expenditure side, the items of "Salaries," "Pension," "Freight," "Meetings," "Contingencies," and "Printing Circulars, &c.,"

show an increase. Owing to payment of salaries for December last during that month, there is an increase of Rs. 156-8-9 under this head. For the same reason, there is an increase of Rs. 4 under "Pension." The estimate for "Freight" has been exceeded by Rs. 13-8-5. This is due to supplying other Societies with back volumes of the Society's publications in exchange. The amounts allowed for under the heads "Meetings," "Contingencies," and "Printing Circulars, &c.," have been slightly exceeded.

There were three extraordinary items of expenditure during 1901 under the heads of "Furniture," "Royal Society's Catalogue," and "Insurance" not provided for in the Budget. Rupees 112-10 was paid for supplying entire new punkha frills. The expenditure on the Royal Society's Catalogue has been Rs 450-9-9. Rupees 312-8 was paid to Messrs. Duncan Brothers and Co., being fire insurance premium from 19th April 1901 to 19th April 1902.

The Budget Estimate of probable Ordinary Receipts and Expenditure for 1902 has been fixed as follows: Receipts Rs. 18,375; Expenditure Rs. 16,911-4.

On the Receipt side the estimated incomes under the heads "Subscriptions" and "Sale of Publications" is based upon the average of the actual amount received in the past three years. "Interest on Investments" has been increased by Rs. 170 on account of the interest on temporary investments. "Rent of Rooms" has been increased by Rs. 175 owing to the Photographic Society of India being charged an increased rent of Rs. 25 per month from May 1902.

On the Expenditure side, the item of "Meetings" has been slightly increased. The increase of Rs. 500 for books is required to adjust Messrs. Luzac and Co.'s account and to enable the Society to purchase some new books for the Library. Rupees 1,211-6-5 of last year's grant remain unexpended. As there has been no petty repairs last year, a sum of Rs. 100 has been allotted for the purpose.

The item "Proceedings" is based upon the actuals of the past three years, and as the addition to the Society's Library is published yearly a sum of Rs. 600 will be sufficient. Rupees 5 has been allotted for registration fee for 1902.

There is a new item of Rs. 625 under the head "Insurance." Rupees 312-8 was spent last year, but on renewal of the policy the insurance premium will be doubled.

There will, moreover, be an extraordinary item of expenditure under "Library Catalogue." An additional sum of Rs. 100 has been paid to Mr. H. B. Perie, the compiler, on account, leaving a balance of Rs. 1,100 for the budget of 1902.

BUDGET ESTIMATE FOR 1902.

Receipt.

		1901.			1901.			1902.		
		Estimate.			Actuals.			Estimate.		
		Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Subscriptions	...	7,000	0	0	7,995	14	0	7,500	0	0
Sale of Publications	...	600	0	0	879	3	3	700	0	0
Interest on Investments		5,530	0	0	3,445	12	0	5,700	0	0
Rent of Rooms	...	1,200	0	0	1,200	0	0	1,375	0	0
Government Allowances		3,000	0	0	4,000	0	0	3,000	0	0
Miscellaneous	...	100	0	0	81	7	3	100	0	0
Total	...	17,430	0	0	17,602	4	6	18,375	0	0

Expenditure.

		Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Salaries ...	...	3,800	0	0	3,956	8	9	3,800	0	0
Commission ...	...	425	0	0	424	3	2	425	0	0
Pension ...	...	52	0	0	56	0	0	52	0	0
Stationery ...	...	120	0	0	117	1	0	120	0	0
Lighting ...	...	60	0	0	42	8	0	60	0	0
Municipal Taxes ...	...	884	4	0	884	4	0	884	4	0
Postage ...	...	550	0	0	542	2	6	550	0	0
Freight ...	...	60	0	0	73	8	5	60	0	0
Meetings ...	...	60	0	0	85	9	0	80	0	0
Contingencies ...	...	300	0	0	307	7	0	300	0	0
Books ...	...	1,500	0	0	288	9	7	2,000	0	0
Binding ...	...	750	0	0	688	13	0	750	0	0
Journal, Part I ...	...	2,100	0	0	958	0	0	2,100	0	0
Ditto, „ II ...	...	2,100	0	0	896	10	0	2,100	0	0
Ditto, „ III ...	...	2,000	0	0	1,273	15	0	2,000	0	0
Proceedings ...	...	1,000	0	0	480	8	0	600	0	0
Printing Circulars, &c....	...	200	0	0	207	1	0	200	0	0
Registration Fee ...	...	15	0	0	15	0	0	5	0	0
Auditor's Fee ...	...	100	0	0	100	0	0	100	0	0
Petty Repairs ...	...	50	0	0	.....			100	0	0
Insurance ...	...	.....			.....			625	0	0
Total ...		16,126	4	0	11,397	12	5	16,911	4	0

Extraordinary Expenditure.

	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Library Catalogue ...	1,200	0	0	100	0	0	1,100	0	0
Repairs ...	6,000	0	0	5,050	1	3	.....	
Royal Society's Catalogue	.....			450	9	9	.....	
Furniture ...	.....			112	10	0	.....	
Insurance ...	.....			312	8	0	.....	
Total ...	7,200	0	0	6,025	13	0	1,100	0	0

Agencies.

Our London Agency is still in the hands of Messrs. Luzac and Co., from whom we have not yet received a final account. The value of the publications sent to them during the year amounts to £35-14, representing 313 pieces of the *Journal* and *Proceedings* and Rs. 179-14, representing 365 components of the "Bibliotheca Indica." From them we have received books and papers of the value of £38-6-9.

Our Continental Agent is Mr. Otto Harrassowitz, to whom we have sent publications valued at £13-8-6 and Rs. 184-8, of which £16-10-10 and Rs. 179-10-8 worth have been sold for us. Other books were sent for sale, amounting to Rs. 50. From them we have received books and papers of the value of £34-3-8.

Library.

The total number of volumes or parts of volumes added to the Library during the year was 2,461, of which 575 were purchased and 1,886 presented or received in exchange for the Society's publications.

A new edition of the Society's Library Catalogue is still under preparation. On detailed inspection of the manuscript by the Sub-Committee, the compiler was asked to revise the manuscript, and for the extra work involved his honorarium was increased by Rs. 300, making a total of Rs. 1,300.

International Catalogue of Scientific Literature.

During the year 1901, the work of the Catalogue, the preparation of Index-slips or cards, as required by the International Catalogue Committee, was begun. These were submitted for correction to the members in charge of the various sections, and four batches of card-slips, 479 in number, were despatched to the Director of the International Catalogue. Up to the end of last year no information as to the probable date of publication of the Catalogue had been received, and the Director has been written to on the subject. A report on the working of the Bureau from

its inauguration in June 1899 to June 1901 was submitted to the Government of India, Home Department, and a further grant of Rs. 1,000 has been placed at the disposal of the Society towards carrying on the work

Insurance of the Society's Building and its Contents.

On the recommendation of the Repairs Sub-Committee, the Council requested Messrs. Duncan Brothers and Co., Agents of the Lancashire Insurance Company, to issue a cover for Rs. 2,50,000, being the total amount of insurance over the Society's building and its contents at a premium of 2 annas per cent. per annum. Messrs. Duncan Brothers and Co. issued the Policy, but the Calcutta Fire Insurance Agents Association rated the Society's premises at 4 annas per cent. per annum instead of 2 annas per cent. Messrs. Duncan Brothers and Co. agreed to continue the Policy issued at 2 annas per cent. till expiry date, but on renewal of the Policy to charge 4 annas per cent. per annum. As the increased fire insurance premium is due to the Photographic Laboratory, the Council have asked the Photographic Society of India to pay an additional rent of Rs. 25 per month from May 1902.

Barclay Memorial Medal.

In 1895, the Surgeon-General of the Indian Medical Service offered the Barclay Memorial Medal to the Asiatic Society of Bengal together with the Rs. 500 odd belonging to the fund. The Council of the Society accepted the offer and rules were framed to regulate the award which were published in the Society's Proceedings for August 1897. During 1901, the Council of the Society awarded the first Barclay Memorial Medal to Mr. E. Ernest Green, Government Entomologist, Ceylon, in recognition of his contributions to Economic Entomology during the past year.

Max Müller Memorial Fund.

At the instance of the Executive Committee of the Max Müller Memorial Fund, a Sub-Committee was appointed by Council. The Sub-Committee appealed for subscriptions to all the members of the Society in India and Burma and to other supporters interested in India and Indian studies. Rupees 165 has been received and the list is still open for subscription. Dr. Bloch, Secretary to the Indian Sub-Committee of the Max Müller Memorial Fund, is prepared to receive further subscriptions.

Proposed Re-organization of the Society.

There were several meetings of the Committee in connection with the proposed alterations in the status of the Society, and after due deli-

beration the Committee recommended to the Council that the final consideration of the question be postponed, pending a further report from the Committee.

Proposed sale of the Society's Premises.

On receipt of an enquiry from the Honorary Secretary of the United Service Club, whether the Society would entertain any proposal on the part of the Club to purchase the Society's premises and on what terms, the Council referred the matter to a Sub-Committee, consisting of Major A. Alcock, Mr. S. C. Hill, Mr. W. K. Dods, Mr. J. Bathgate, and Mr. J. D. Nimmo. The Sub-Committee, after obtaining legal assurance of the Society's right to sell its premises, drew up a report with the recommendation that the proposals set forth therein be submitted to the Members of the Society. The Council approved of the report and ordered it to be printed and circulated in accordance with Rule 64A. The question was brought up at the Monthly General Meeting in January, and the Meeting decided that the matter be referred back to the Sub-Committee with the request to frame an estimate of the probable cost of acquiring a new site and erecting a new building with and without accommodation for a Secretary in a suitable neighbourhood, and also to take such steps as might seem sufficient to ascertain definitely what sum is likely to be received by the sale of the present house and site.

Exchange of Publications.

During the past year, the Council accepted six applications for exchange of publications with other Societies, viz.: (1) from the Treasury Department, Bureau of Statistics, Washington, the Society's *Journal*, *Parts II and III*, and *Proceedings* being exchanged for their publications; (2) from the École Française d'Extrême Orient, Saigon, the Society's *Journal*, *Parts I-III*, and *Proceedings* for its Bulletin; (3) from the University of Aberdeen, the Society's *Journal*, *Parts I-III*, and *Proceedings* being exchanged for their Studies; (4) from the Società Romana di Antropologia, the Society's *Journal*, *Part III*, and *Proceedings* being exchanged for its Atti; (5) from the Korea Branch of the Royal Asiatic Society, the Society's *Journal*, *Parts I and III*, and *Proceedings* for their Transactions; (6) from the Museo de Historia Natural de Valparaiso, the Society's *Journal*, *Part II*, and *Proceedings* being exchanged for their publications.

Secretaries and Treasurer.

Dr. T. Bloch carried on the duties of Philological Secretary and Editor of the *Journal*, *Part I*, throughout the year, except for four months,

when he was absent on deputation, during which period Mahāmāhō-pādhyāya Haraprasād Shāstri took charge of the office.

Mr. L. de Nicéville continued Natural History Secretary and Editor of the *Journal*, Part II, till his death in November, when Mr. Frank Finn kindly consented to undertake the work.

Mr. F. E. Pargiter carried on the duties of the Anthropological Secretary and Editor of the *Journal*, Part III, throughout the year.

Mr. T. H. Holland resigned the office of General Secretary and Editor of the *Proceedings* in March, and Major A. Alcock, F.R.S., was appointed. Major Alcock resigned the office in December, and Mr. J. Macfarlane, Librarian of the Imperial Library, agreed to carry on the duties.

Mr. W. K. Dods continued Treasurer throughout the year, except for a month, when he was absent from Calcutta and Mr. C. Michie kindly agreed to carry on the work.

Mahāmāhōpādhyāya Haraprasād Shāstri was in charge of the *Bibliotheca Indica* and the search of Sanskrit manuscripts and carried on the duties of Joint-Philological Secretary throughout the year.

Mr. J. H. Elliott continued Assistant Secretary and Librarian throughout the year.

Publications.

There were published during the year nine numbers of the *Proceedings* (Nos. 11 and 12 of 1900 and 1-9 of 1901), containing 116 pages of letter-press; four numbers of the *Journal*, Part I (No. 2 of 1900, Nos. 1 and 2 of 1901, and Extra No. 2 of 1901) containing 261 pages of letter-press and two plates; two numbers of the *Journal*, Part II (No. 4 of 1900 and No. 1 of 1901), containing 206 pages of letter-press and a plate of 1900; two numbers of the *Journal*, Part III (one number of 1900 and No. 1 of 1901), containing 185 pages of letter-press and 21 plates. There was also published Part III of Catalogue of the Society's Sanskrit books and manuscripts.

Journal, Part I.

In the Philological Section of the Society's *Journal* four numbers have been published, covering altogether 258 pages of letter-press. One of these numbers belongs to Vol. LXIX of 1900, two to Vol. LXX of 1901, and one is an extra number for 1901 giving a sketch of the Ladākhī Grammar. Materials for another number are ready, and it has been proposed to issue another extra number containing appendix to Dr. Hoernle's Report on Central Asian Antiquities.

The last Annual Report contains a synopsis of No. 2 of 1900 from the pen of Dr. Bloch. In the rest of the numbers there is very little of

history or antiquities. They are more linguistic and numismatic than in previous years, but they fully sustain the reputation of the *Journal of the Asiatic Society of Bengal*. Two linguistic papers by the Revd. Mr. T. Grahame Bailey, B.D., M.A., Wazirabad, are very important from many points of view. There are criminal tribes in the Panjab who have peculiar dialects of their own unknown to the peaceful inhabitants. This facilitates the commission of crime and helps the criminals to escape detection. Efforts were often made to enter into the mystery of their dialect, but in vain. Revd. Mr. Bailey has, however, succeeded, at last, in gaining clues to the decipherment of two of these dialects. The Sāsīs are thieves and the Çulūās are cattle-poisoners. Ordinarily they speak the Panjabi dialect, but they use their peculiar dialect only at the time of the commission of crimes. The Çulūās change Panjabi words by the introduction of the syllable *ma* in the middle of the word, just as *skul-skumāl*, but the Sāsi change them in a variety of ways, all of which are equally well known to the initiated.

But the most important linguistic paper of the year is a sketch of the Ladākhi Grammar compiled by A. H. Francke. It is a complete grammar of the Ladākhi dialect of the Tibetan language, and a knowledge of the grammar of the classical Tibetan is essential in understanding the dialectic variety of Ladākhi. The verbal system of Ladākhi shows an advance on the classical system. The classical verb is more a verbal noun, for the verbal strength of a sentence lies less in the verb itself than in the subject of the sentence, whether that be used in the nominative or instrumental. The utterance of the verb in the Ladākhi dialect rests on this: It can no longer be constructed alternately with the nominative and the instrumental, but that each separate verb takes one or the other case alone. The Ladākhi verb shows three distinct stems: (1) The present stem; (2) the perfect stem; and (3) the imperative stem. The future is often formed by adding *in* to the verbs, e.g., *cha-in*, shall go.

Mr. Francke has rendered another important service by publishing three original documents in the Ladākhi dialect giving the history of the country from the earliest time up to the settlement of the country under the Rājās of Kāçmīr. They were compiled and translated by the late lamented Karl Marx, a Moravian missionary at Leh, in Ladākhi. Mr. Francke, by publishing the Grammar and the three Histories with translations, has brought the Ladākhi dialect within the reach of scholars in Europe.

Two papers on numismatics by W. Theobald, M.N.S.L., one on Kāçāpana Coinage and the other on the Copper Coins of Ancient India, traverse the entire numismatic work done on these two classes of

coins. The writer examines all the devices found on these and attempts to give them their proper attribution. Errors had accumulated as regards the identification of these various devices for more than eighty years. The errors were made by distinguished men engaged in the pioneer work of finding, classifying, figuring and so on. A vast number of coins have now been collected in different museums and private coin-cabinets and it is now time that a systematic survey should be made of the vast accumulation of materials. Mr. Theobald took upon himself this arduous work and the Indian numismatists will remain ever indebted to him for the thorough manner in which he has performed it. He has rejected many symbols as wrong identifications; he has improved upon many attributions; he has given a better classification; and has placed great importance on the geographical distribution of coins; as, for example, a symbol identified with the deer has been proved to stand for a buffalo. A tree on a coin from Shaharanpore was regarded as pipal, but in that part of the country pipal trees are a rarity, and so it should be Himālayan cedar—so fine, so striking, and so magnificent a tree. From the indices appended to his papers it will be seen how fertile the Indians were in their inventions about these devices. They have pressed Trees, flowers, fruits, animals, birds, shell-fish, in fact, everything under the sky, into their service, and it is no wonder that eminent men were mistaken as to their identification. The future numismatist will find this work much easier. Thanks to Mr. Theobald.

The Sunga or Mitra dynasty succeeded the Mauryas in the Empire of Northern India about the year 180 B.C. The Sunga coins are very rare. Colonel C. E. Shepherd had found two coins of this dynasty. But they belong to two kings of the dynasty not known before, named Dhruva Mitra and Rudra Gupta. This is a real gain to our knowledge of the Sunga dynasty the kings of which played an important part in North India at a time when the Greeks were establishing themselves in the Panjab.

In a previous paper Mr. Hoey identified Sewan, a station in the Saran district, with the famous Kuçinārā, the place of Buddha's death. In a supplement to that note of his published during the year under review, the writer contends that the Titāria Stūpa between the Daha and Sondi Rivers is no other than the Stupa mentioned by Hwen Thsang as built for the purpose of commemorating the bird which plunged into the water and flying up shook its wings to extinguish a forest fire. This bird-stupa stood near the vihāra, in which was the figure representing the Nirvana with the adjacent stūpa and a pillar bearing a note to the fact. So he thinks that the great Nirvana Stūpa should be somewhere near the Titāria Stūpa. He thinks he has also found the stūpa commemorating the pious deeds of Drona mentioned in Buddhist

books, who interposed to prevent the resort to arms and divided the relics of Buddha to the seven claimants.

Babu Nandalāl Dey visited the Kaluha hill in the Hazaribagh district on the 21st April 1890. With the sole exception of the image of Kuleçvari he found the images at the place to be all Buddhistic, and so he suspects that the place is the Makulaparbata of the Burmese Buddhist annals. The place has subsequently been visited by Dr. Stein and he confirms the statements of the Babu.

In the district of Jessore there is a place named Çaila kūpā, where there is an old mosque which Maulvi Abdul Wali, the Sub-Registrar of the place, has identified with a masjid erected by the great Muslim Sultan of Bengal, Alauddin Husain Shah, at the request of Huzrat Maulana Muḥamad 'Arab, a holy man who flourished at his time. The work was commenced by Huṣain Shah's son, Nasir Shah,—who subsequently became King of Bengal.

Mr. E. D. MacLagan, C.S., of Multan, has succeeded in identifying many of the places mentioned in the account of Multan Sarkar in the third book of the *Ain-i-Akbari*. He has also succeeded in proving that the rivers Indus and Chenab did not then flow in their present channels.

Mahāmāhopādhyāya Haraprasād Shāstri read three papers on the history of the re-organization of the Caste System in Bengal under the greatest of its Hindu kings, namely, Vallāla Sena. His authorities are two copies of Vallāla-carita, copied in 1707 and 1791. He has proved that the work contains a genuine history of the administration of Vallāla Sena and he has discovered that the Acaryyas of Bengal, the astrologers, diviners, and pacifiers of planetary deities, though they pass at present as Brahmanas, are none else than the Magi, or the descendants of the Median and Persian priesthood.

From Vallāla-carita Mahāmāhopādhyāya Haraprasād Shāstri has shown that the present low position of the wealthy and influential caste of Sonar banias in Bengal is owing to the fact that they were Buddhists, they ridiculed the Brahmanas, they joined the Buddhist Pāla kings against Vallāla and they were connected with the Pālas by marriage also. Mahāmāhopādhyāya Haraprasād Shāstri has shown from the same authentic source that the Kaivarthas, so influential in the district of Rajshahi, were once the lords of North Bengal, that they headed a successful rebellion against the Pālas, that when worsted they joined Vallāla, who raised their status in the Hindu society and gave them the governorship of South Bengal, where in the sub-divisions of Ulubaria, Tamruk, and Kontai they are still very influential.

Mahāmāhopādhyāya Haraprasād Shāstri's papers have appeared in the Proceedings.

Journal, Part II.

Although only two numbers of Part II of the Society's *Journal* have appeared during the past year, and of these one belonged to the year previous, yet several interesting papers have been published.

Major L. Rogers, I.M.S., contributes a most valuable account of the relationship of the water-supply, water-logging, and distribution of *Anopheles* mosquitoes, respectively, to the prevalence of malaria north of Calcutta. He concludes that a good water-supply is an important prophylactic measure in the lessening of the prevalence of malaria, and that the question whether the *Anopheles* mosquitoes play a part by taking the malarial parasites back to the tanks from their human hosts or not must be left to be determined by future experiments.

Dr. P. C. Roy has a paper dealing with two points in Chemistry, entitled, respectively, Further Researches on Mercurous Nitrite and its Derivatives, and On Mercurous Iodide and a new Method of its Preparation.

There are three botanical papers: A description of a new Himalayan genus of *Orobanchaceæ*, by Mr. J. S. Gamble and Major Prain, I.M.S., the eighteenth instalment of the latter gentleman's *Noviciæ Indicæ*, dealing with the Asiatic species of *Dalbergia*; and the twelfth of Sir George King's Materials for a Flora of the Malayan Peninsula. For the purpose of studying the Asiatic *Dalbergias* Major Prain has consulted specimens from no less than fifteen herbaria, besides that of Calcutta, in the hope of publishing a monograph of the genus; but this proving impracticable under present circumstances, the seventy-four known Asiatic species have been enrolled in a hand-list with bibliography and record of distribution. In the case of the less familiar species the field numbers of the specimens are quoted in order that the list may be of use to workers in herbaria which Major Prain has been unable to visit, should these contain duplicates bearing these numbers.

In Sir George King's paper will be found descriptions of all the species of the Myrtle order to be found in a truly indigenous condition in the Malay Peninsula, Straits Settlements, and Andaman and Nicobar Islands. Although this order of plants is best represented in South America and Australia, the above mentioned portion of the Oriental region yields no less than a hundred and twenty-two species, belonging to eleven genera. The common Myrtle is the only European form. The most important genus here dealt with is *Eugenia*, of which no less than ninety-six species are described, more than half of these being new to science. New species of the genera *Barringtonia*, *Tristania*, *Pseudo-Eugenia*, and *Planchonia* are also dealt with in this valuable contribution to Oriental botany.

The contributions of zoological writers do not bulk very largely in our publications for the past year, owing largely to the fact that our leading contributor, Major A. Alcock, I.M.S., F.R.S., has been occupied on other publications, which under the circumstances may well claim notice here. One is the first instalment of a Catalogue of the Decapod Crustacea in the collection of the Indian Museum, published by the Trustees. This part contains the Introduction, and an account of the curious group Dromides or Dromiacea, crabs which are remarkable for their narrow form, long antennae, and the position of the last pair of legs on the back; these curiously-placed legs being often used to carry a sponge or shell used as a protection. These crabs, as a matter of fact, find their nearest allies in the lobsters.

Full descriptions of the Indian genera and species are given, together with lists of the specimens in the Museum collection, and the locality and depth at which these were obtained, generally by the Marine Survey ship *Investigator*.

The Introduction will be of especial value to students of the Crustacea everywhere, inasmuch as it contains a full account of the structure of the group Decapoda (comprising the crabs, lobsters, and shrimps), illustrated by reference to the Andaman Lobster (*Nephrops andamanicus*). This species has been chosen instead of the usual type, the European crayfish (*Astacus fluviatilis*), since it belongs to our local fauna in the East. Subsequently the *Brachyura* or crabs are compared with this general type. A particularly interesting section is that which deals with the general bionomy, or habits of life, of crabs as a whole. They are, says the author, "the most highly organised and most intelligent of the crustacean class. The Cyclometopes and Catometopes are particularly alert and active, and among several of the gregarious species of amphibious Catometopes life appears to be almost as complex as it is among many insects."

The second and larger work is a complete Descriptive Catalogue of the Indian Deep-sea Crustacea in the Indian Museum, being a revised account of the deep-sea species collected by the *Investigator* and also published by the Trustees. This is by no means a reprint of earlier published reports, for in addition to tables and descriptions of species, it contains tables and definitions of all the groups under which these are arranged, from subgenera up to suborders; and it also embodies a large amount of material which the author has prepared to serve as the basis for the more comprehensive work on the Indian Crustacea above commented on. Accounts of many of the species dealt with herein have been published in our *Journal* by Major Alcock and Captain A. R. S. Anderson, I.M.S., and by the late Professor Wood-Mason. This large

memoir, like the work last mentioned, is fully illustrated, the illustrations in the present book being peculiarly fine. It is gratifying to note that their excellence has been much commented on in England, more especially as the drawings are the work of a native artist trained to the work by Major Alcock himself.

To the general student of animal life and the intellectual public as a whole the third of Major Alcock's productions during the past year will be the most interesting. This is "Zoological Gleanings from the Royal Indian Marine Survey Ship *Investigator*," originally published among Scientific Memoirs by Medical Officers of the Army in India. Herein are collected a number of most valuable and interesting observations hitherto scattered among reports and papers where they are not always easily accessible and are liable to be overlooked. These observations deal with such fascinating subjects as commensalism (the association of two very different animal forms for their mutual benefit), sexual characters, pairing and parental care, protective and warning devices and colouration, courtship, and habits of breeding and feeding. And these relate not only to crustaceans and fishes, but to other marine animals, such as echinoderms, while there are also some excellent observations on birds and reptiles. Taken altogether, this paper is a remarkable contribution to the natural history of many groups of animals, and shows the author equally at home in field observation as in systematic work, which is more than can be said, unfortunately, for many zoologists in these days of wild speculation and quibblings about nomenclature.

In his department of butterflies, our late and deeply-to-be-regretted member, Mr. L. de Nicéville, was also always conspicuous as a worker equally competent in field or cabinet study, and in his last year's paper a "Note on the Butterflies comprised in the subgenus *Tronga* of the genus *Euploea*," he shows his usual perspicacity in attempting to reduce to order the limbo of synonyms in which workers have plunged these unfortunate insects, with which he was so well acquainted in life.

Mammals and birds are the chief forms of animal life dealt with in two interesting papers by Captain A. H. McMahon, C.I.E., which embody notes on the fauna of the little-known regions of Dir, Swat, and Chitral. Of special interest are the author's observation of the occurrence of monkeys in this region and his account of the Chitrali method of catching goshawks.

Lastly, some zoological contributions to the Proceedings of the Society naturally come in for mention here. There have been some interesting exhibits, Major Alcock having shown some fine examples of the Museum modeller's work in snakes and deep-sea fish, and Mr. Finn a living guinea-fowl provided with a neck-tassel of feathers, a curious

abnormality in so little variable a bird; while in the Proceedings was published a most useful paper by Miss Evans, dealing with the feeding habits and reproduction of the common grey mosquito of Calcutta. In this communication it is shown that the insect may live in its adult stage for as long as five weeks, and that it exhibits a marked preference for the blood of the house-sparrow as food, as well as for our own. Altogether the scientific section of the Society's work may be said during the last year to have fully maintained its interest.

Journal, Part III.

This part of the *Journal* for 1900 contained a long paper by Lt.-Col. Waddell on the Tribes of the Brahmaputra Valley, and could not be issued during that year because of the difficulty and delay attending the revision of the proofs by the author, who was then in China. The article was at length passed through the press and the *Journal* for 1900 was published during the early part of 1901. The tribes in that Valley represent radical elements from all the three great ethnological sub-regions, Indo-Chinese, Indo-Malayan and Indian; and the author describes their peculiar characteristics, dealing with each tribe in detail, and gives a large quantity of anthropometric data which he collected himself.

Papers, which had been read before the Society during 1900, were then brought into the *Journal* for 1901 and were issued at the beginning of the year. They describe some castes and legends in Berar, stone implements in the Santal Parganas (where they are known as lightning-stones), and some riddles from Behar. The second Number contains an article, in which Mr. Holland describes the Coorgs and Yeruvus in the Madras Presidency and gives valuable information and measurements collected by himself; and another paper setting out an Accumulation Droll and Rhyme in Bengal. Mr. Holland's conclusion is that the Coorgs, when judged according to ethnological characteristics, take a very high position among the races of South India.

Coins.

Fifty-seven coins were presented to the Society by the Governments of Bombay, Madras and N.-W. Provinces during the year under review. Of these 3 are gold, 7 copper, 41 silver and 6 lead coins. The latter bear the die of the Andhra Dynasty who ruled Eastern and Southern India from the beginning of first century B.C. to the end of the second century A.D. Of the gold coins one belonged to the reign of Jagadeka-Malla of the later Calūkyā Dynasty of Kalyāṇa in the Marhaṭṭa country, found in Bijāpur District, within his kingdom. The second gold coin

comes from beyond India. It belongs to the *Khalipas* of Baghdād. The third belongs to the *Toghlaq* Dynasty of Delhi. Most of the silver coins belong either to the *Moghuls* or to the independent *Muhammadan* Dynasties who preceded the *Moghuls*. One of them, however, is of peculiar interest. It belongs to *Asala Pala*, a Hindu king of Kabul, who must have flourished before the *Ghaznavites* established their rule in that country. The copper coins are not of much importance. Three of the copper coins are dated. They all, however, belong to a very late date.

Bibliotheca Indica.

Twenty-four Fasciculi have been published during the year at a cost of Rs. 10,099-11-2. Of this sum the printing charges amounted to Rs. 5,926-14 and the editing charges Rs. 4,172-13-2. The average cost of publishing each fasciculus being Rs. 420. Of these 24 fasciculi, 22 fasciculi belong to the Sanskrit, two to the Arabic-Persian series and none to Tibetan. No work has come to a close during the year. These 24 fasciculi belong to 14 different works. The following is a description of the three new works taken in hand, all being in the Sanskrit series.

1. *Advaita Cintā-kaustubha* by Mahādevānanda Yati, a work belonging to the non-dual school of Vedānta philosophy. It was composed in the 18th century and it embodies the latest development of the non-dual theory. It is being edited by Babu Girindranath Dutta, B.A., Superintendent, Hatwa Raj. The work is accompanied with a commentary,—an old and authentic one which has the rare merit of really elucidating the text.

2. *Varṣa-kriyākaumudī*—by Govindānanda Kavikaṅkanācāryya, under the editorship of a young paṇḍit of Bhātpārā, named Kamal Kṛṣṇa Smṛtibhūṣaṇa. The importance and usefulness of the works on Hindu Law and Ritual, which preceded Raghunandana's codification in the 16th century, in the eye of scholars and anthropologists can scarcely be overrated. The Society was anxious for a long time to collect MSS. of such works and they have succeeded in this to a great extent. They have discovered several old codes. Of these Govindānanda's code, complete in four parts, is often quoted by Raghunandana and his school. It gives a complete review of all the Rituals to be observed during the course of a year. The Council of the Society therefore, proposed to publish it. It was also proposed to infuse new blood in the editorial staff of the *Bibliotheca Indica* series, and a young Paṇḍita from Bhātpara has been chosen.

3. For the same reason another young Paṇḍit, Paṇḍit Vinoda

Vihāri Kāvya-tīrtha, a young man serving under Mahāmāhopādhyāya Haraprasād Shāstri, as a travelling Paṇḍit and a collector of MSS., has been chosen to edit the Nityācārapaddhati by Vidyākara Vājapecyī, an ancient Smṛti compiler of the highest authority in Orissa. Sanskrit works of that country were unknown to the scholars of Europe and it was the zeal of this young Paṇḍit, which brought them to light, and the most important of them was Nityācāra. Therefore the discoverer was entrusted with the work of editing it.

Search for Manuscripts.

During the year under review was published the quinquennial report of the operation of the search for Sanskrit and other MSS. in Bengal. From 1891 the work has been done by Mahāmāhopādhyāya Haraprasād Shāstri, M.A., Principal, Sanskrit College, Calcutta. During the five years covered by the Report Mahāmāhopādhyāya paid two visits to Nepal and two to Benares, and his agents were active in Orissa, Mithila, East Bengal, and West Behar. Some of the discoveries of these years will leave their stamp on the history of India. Dhanurveda was known only by name. Four distinct works were discovered during these years, giving some idea of the military tactics in ancient India. Many new works were discovered on Medicine and Veterinary Science. A portion of the Kācyapa Saṁhitā was brought to light. In Astrology the translation of a Greek work into Sanskrit by a Greek *savant* was discovered. Several historical works of great importance were made known to the public.

The Report has been very favourably received in Europe and Mahāmāhopādhyāya Haraprasād Shāstri has received many appreciative letters from eminent Orientalists there. The President has requested the Government of India to send copies of the Report to the Darbar of Nepal, where Mahāmāhopādhyāya Haraprasād Shāstri made some of his most important discoveries. The discovery of MSS. of Purāṇas and Tantras written in ancient Gupta character has thrown back the date of the composition of these two classes of works by several centuries. Tantras were generally considered to have been as old as the twelfth century, but Mahāmāhopādhyāya Haraprasād Shāstri has discovered a Tantra work dated 908 A.D. and two more MSS. of tantrika works which go back to the sixth century. A MS. of Skanda Purāṇa belongs to the seventh century, so these two classes of works may now be pronounced to have been as old as the second or third century A.D., if they did not belong to earlier centuries.

The Report having been read and some copies having been distributed, the President invited the meeting to consider it at their leisure.

The President then announced that the Trustees of the "Elliott Prize for Scientific Research" had awarded the prize for the year 1901 to Babu Sarasi Lal Sarkar, and laid on the table the following :—

REPORT ON THE ELLIOTT PRIZE FOR SCIENTIFIC RESEARCH FOR 1901.

The Trustees have received Essays from the following competitors for the prize :—

1. An essay dealing with the properties of recurring radix fractions. By Sarasi Lal Sarkar, M.A.
2. A Memoir on Singular Solutions of Differential Equations. By Jnan Saran Chakravarti, M.A.
3. A new method of solving Quartics by Radicals. By Nripendra Nath Chattopadhyay.
4. Self-Acting pump. By Atul Krisna Day.

The Trustees, after consulting experts as provided in the scheme, adjudge the prize for the year 1901 to Babu Sarasi Lal Sarkar, M.A.

T. RALEIGH, <i>Vice-Chancellor, Calcutta University.</i>	} Trustees.
A. PEDLER, <i>Director of Public Instruction, Bengal.</i>	
J. WOODBURN, <i>President, Asiatic Society of Bengal.</i>	

CALCUTTA :
4th February, 1902. }

The President then addressed the meeting.

ANNUAL ADDRESS, 1901.

GENTLEMEN,

I do not propose to detain you to-night with a long address. As it happens, I have been engrossed during the last two weeks in other matters, which have left me scant leisure, but I do not shelter myself behind that excuse. It would be an unworthy return for the honour you paid me in electing me your President if I did. But it is not possible that any man can know or profitably address you on all the varied subjects with which the Society concerns itself, and I think I introduced a worthy variation in the customs of our body in leaving to the experts whom we make our Secretaries the duty of explaining, as they alone can properly do, the researches of the year in their several departments. They have prepared reports of much interest, which will be separately placed before you, and I shall content myself with drawing

your attention to the most prominent of the facts they mention. However unlearned any one of us may like myself be in specific branches of our enquiries, I am quite certain that there is not one of us who is not interested in every research, which unfolds new features of Eastern life, and in the conclusions which those researches add to our general knowledge.

Before, however, going on to these more special questions, I may congratulate the Society upon the position it holds at the end of this year. The roll of its members stands higher than it has done for sixteen years. Its financial position has correspondingly improved, and the balance at its credit now stands at the respectable figure of Rs. 1,60,000. I do not think it has shirked, to attain this useful end, any of its understood and traditional duties. For instance, it has persevered faithfully in its self-imposed but invaluable duty of publishing, for the information and use of the learned, ancient manuscripts of importance which have come under its cognizance. The Society spent upwards of Rs. 10,000 last year in the furtherance of its *Bibliotheca Indica*. The published fasciculi were chiefly from Sanskrit manuscripts. Two of these are of much importance: one a treatise of the 18th century on the Vedānta philosophy; the other a codification of the 15th century of the existing rules of Hindu law and ritual. Important progress was made in the printing of Sir George King's costly, but very valuable, memoir on the Flora of the Malayan Peninsula—a work in which the Government of the Straits Settlements has now taken a warm and practical interest. Upon the contributions of the members to the *Journal of the Society* I shall presently say something. I am speaking at present only of the financial side of our business. We have our buildings in good repair; for the first time we have insured them. But though we stand well, we might stand better, and there are many directions in which larger money help from us is most necessary for the prosecution of researches, both scientific and literary. We have therefore seriously considered the question whether we might not with advantage sell our present house and its site and transfer ourselves to a cheaper situation. Your decision will, of course, depend upon the offers which may be made to you.

A proposal of cardinal importance was also brought before you for altering the status of the Society by including in its scope the development of Indian art, and especially by an enlarged attention to the application of science in Eastern studies. The decision of the Society has been to leave its name and status unchanged. If I may say so, I think that decision was right. The Society has an ancient and honoured name. Its special and proper objects have been consecrated

by the lapse of years. The scientific students it was proposed to allure to our rolls have their independent and specialised organizations, and I think the majority of the Society were right in the belief that the originators of the proposal would not succeed in merging these Associations in the wider and more general body of the Asiatic Society. Our Society on its old and time-honoured basis is losing no ground. On the contrary, it is growing in strength and vigour, and it is to my mind certain that the interest of its enquiries must steadily reach out to and fascinate an increasing circle of Indians and Europeans alike. A great Indian scholar, like our friend Pandit Haraprasād Shāstri, whose contributions to our journals show such wide reading and thought, cannot fail to attract his countrymen to our rooms; and there is hardly a year, in which we are not delighted by the accretion of young Englishmen, like Captain McMahon and Mr. MacLagan, who find time in all their busy lives to discern and track out things of value to our knowledge of this great India. May the Society ever grow and prosper.

Permit me now to speak to you very briefly of some of the results of the researches of the year.

In the Philological Section, the most important contribution was a paper by Mr. A. H. Francke on the grammar of the Ladakhi dialect with three original documents in that language on the history of Ladakh, a paper which, I understand, has already attracted much attention among the scholars of Europe. Mr. Theobald has made a new and exhaustive examination of the copper coins of Ancient India, Mr. Hoey has continued his interesting and ingenious enquiries into sites connected with the life of Buddha, and progress has been made by others in the identification of places of note in the ancient history of India. Perhaps I may be permitted in this connection to make some reference to the conservation of ancient monuments in Bengal. They are not so numerous as in some of the other provinces of India. They are, I am afraid, less imposing or beautiful, but some of them are of high merit. The stone temples of Bhubaneshwar are small compared to the great pagodas of Southern India, but they are beautiful specimens of the stone-carver's art in the seventh century. There are many of them in excellent preservation, and the most precious of them have been or are being restored with a neatness and care which is most creditable to the engineers and their workmen, and will now certainly be safe for a long time to come. In the Malda district there are at Gaur and Pandua the remains of Muhammadan buildings of far greater magnitude and number. The damage to them is unfortunately greater. The Adina Mosque in Pandua must have been in its time one of the largest and

noblest mosques in India ; and at Gaur there are specimens of work in coloured tiles which is unique in Bengal. The repair and where possible the restoration of some of these beautiful buildings is a work of great difficulty and delicacy, but it has begun, and I trust that the result both there and at Bhuvaneshwar will be the preservation to the student of history and of art of specimens, which he will prize, of the ancient architecture of Bengal. I have just returned from a long promised visit to the great fort of Rhotas. The buildings are comparatively modern, but they are historical, and they are almost the only examples we have in Bengal of the conditions of eastern military life a couple of hundred years ago. Fortunately these buildings are almost perfect, practically as sound as when Hamilton visited and mapped them in 1824, and they will command, perhaps, increasingly as the generations pass, the keen interest of the traveller and the historian of this country.

On the scientific side of the Society's work we had a particularly minute and convincing investigation by Major Rogers on the connection between malaria and water-supply. His enquiries were conducted in the riparian municipalities to the North of Calcutta and are now under the practical consideration of the local bodies which govern them. Sir George King, Major Prain and Mr. Gamble have been adding to their botanical discoveries, and Major Alcock has pursued those singularly interesting studies in marine life which in his modesty he calls Zoological Gleanings. His observations on the protective and warning devices of animals, of their adaptations of colour for their protection from their habitual enemies, would attract the quick attention of any who have the smallest knowledge of zoological science. I wish some of these learned gentlemen would take compassion on those who are unlearned or busy, or both. They would earn the grateful thanks of those who stand sorrowfully outside their ranks, if they would prepare for us small guide-books to the bird-life and the plant-life of defined areas, where birds and flowers are many and attractive. It is impossible for any one but a skilled botanist to track out a flower through the vast pages of Hooker's seven volumes. Mr. Gamble set an excellent example by his manual on the trees and shrubs of the Eastern Himalays, but his book is meant for the forester or the planter. What is wanted is a popularly written manual, all the better if it is illustrated, in which the enquirer can easily and quickly learn the names of the birds and flowers around him. Illustrations can now be very cheaply made, and those who have seen the charming little volumes of, I think, the Tract Society on the common wild flowers of England, will know how a book of the kind attracts hundreds to studies in natural history, who otherwise pass by unheeded the beautiful objects with which nature surrounds their path. A small

museum will be opened in Darjeeling next summer, confined to specimens of the birds and butterflies and pictures of the flowers of the Darjeeling hills, but handier methods are wanted, and I hope the want will be supplied. I forgot to mention the lists of the Simla flowers prepared by Mr. Babington-Smith, and of the Mahableshwar flora by Mr. Bridwood, both of them valuable, but neither equal to the delightful standard of the little book I mentioned about English wild flowers. I cannot mention these researches without coupling with them the name of our late Secretary, Mr. deNicéville. His death is a loss we all deeply deplore. It was characteristic of his life that his death came from his devotion to his scientific pursuits. It was on a naturalist's expedition to the lower valleys of the Himalayas that he caught the fever, which caused his untimely and lamented end.

On the Anthropological side we are indebted to that assiduous composer, Major Waddell, for a memoir on the tribes of the Brahmaputra Valley, and to Mr. Holland for another on the Coorgs and Yeruvas.

And now, gentlemen, I have sketched as rapidly I could the outlines of the work of the Society in 1901, and drawn your attention to the more important and interesting of the matters you will find in our records. It remains for me only to congratulate you again on the progress of the Society, and to thank you for the honour you did me in electing me to the office I regretfully lay down. It will be hereafter a gratifying memory if I have been able in my intercourse with my brother officers to persuade them to cultivate according to their several tastes, habits of observation outside the cutcherry which vary and brighten work, and which continuously deepen by practice their interest in the past or the future of this illimitable country.

The President announced that the Scrutineers reported the result of the election of Officers and Members of Council to be as follows :—

President.

The Hon. Mr. C. W. Bolton, C.S.I., I.C.S.

Vice-Presidents.

H. H. Risley, Esq., B.A., C.I.E., I.C.S.

Colonel T. H. Hendley, C.I.E., I.M.S.

R. D. Oldham, Esq., A.R.S.M., F.G.S.

Secretary and Treasurer.

Honorary General Secretary :—J. Macfarlane, Esq.

Treasurer :—W. K. Dods, Esq.

Additional Secretaries.

Philological Secretary:—T. Bloch, Esq., Ph.D.

Natural History Secretary:—F. Finn, Esq., B.A., F.Z.S.

Anthropological Secretary:—E. A. Gait, Esq., I.C.S.

Joint Philological Secretary:—Mahāmāhopādhyāya Haraprasād Shāstri, M.A.

Other Members of Council.

Major A. Alcock, M.B., LL.D., F.R.S.

J. D. Nimmo, Esq.

C. L. Griesbach, Esq., F.G.S., C.I.E.

A. Pedler, Esq., F.R.S.

J. Bathgate, Esq.

T. H. D. La Touche, Esq., B.A.

Captain L. Rogers, M.D., B.Sc., I.M.S.

Kumar Ramessur Maliah.

Arnold Caddy, Esq., M.D., F.R.C.S.

The Meeting was then resolved into the Ordinary General Meeting.

The Hon. Mr. C. W. Bolton, C.S.I., I.C.S., President, in the chair.

The Chairman before taking his seat said:—

"GENTLEMAN,—Two pleasing duties devolve on me at the outset on assuming the office of President of this Society. In the first place, I have to thank you for the great honour which I have received at your hands to-night. Recalling some names of the many distinguished men who have presided over the Society I felt much hesitation in acquiescing in the wish of the Council to nominate me for election to that dignity. You have now been good enough to ratify the Council's nomination, and it remains to me only to couple with my grateful acknowledgment the assurance that it will be my earnest endeavour throughout my tenure of office to promote the welfare of the Society. My second duty and privilege, is to express to our late President, Sir John Woodburn, our deep obligation for his constant and active interest in the management and the work of the Society. We are all aware of the great responsibility and burden of his position at the head of this Province, and of the numerous demands on his time. Nevertheless, and, I fear, at the sacrifice of precious leisure and rest, he has taken a full share in the business of the Society, and for this reason our thanks to him are all the more deeply felt."

The minutes of the last meeting were read and confirmed.

Forty-two presentations were announced.

Lt.-Col. G. Ranking, I.M.S., Mr. F. P. Dixon, Babu Girish Chand Ghosh, Mr. A. C. Sen, Dr. C. Schulden, and Lala Shyamlal, were ballotted for and elected Ordinary Members.

It was announced that Lieutenant B. Scott and Mr. W. A. Talbot had expressed a wish to withdraw from the Society.

The Kumar Sahib of Bansberia brought for exhibition the original sanad issued by the Mogul Emperor Aurangzeb conferring on Raja Rameswar Rai, the hereditary title of "Rai Mahasai;" also a book of original coloured designs made by an ancestor of his in the 18th century for the decoration of a temple.

The General Secretary reported the presentation from the Bombay Branch of the Royal Asiatic Society, of 7 silver coins found in the Ratnagiri District.

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR MARCH, 1902,

The Monthly General Meeting of the Society was held on Wednesday, the 5th March, 1902, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., President, in the chair.

The following members were present:—

Maulavi Abdul Wali, Major A. Alcock, F.R.S., Major W. J. Buchanan, I.M.S., Mr. F. Fiun, The Revd. E. Francotte, S.J., Col. T. H. Hendley, C.I.E., Dr. W. C. Hossack, Babu Parmeshwar Lall, Mr. W. A. Lee, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Mr. E. B. H. Panton, Rai Ram Brahma Sanyal Bahadur, Mahamahopadhyaya Haraprasad Shastri, Babu Chunder Narayan Singh, Babu Lakshmi Narayan Singh.

Visitors:—Mr. J. B. Fuller, C.I.E., Mr. E. W. Harper, Mr. B. M. Morton, Mr. H. E. Stapleton, Mr. H. Wheeler.

The minutes of the last meeting were read and confirmed.

Fifteen presentations were announced.

Babu Rajendra Chandra Shastri and Raja Binoy Krishna Deb Bahadur, were balloted for and elected Ordinary Members.

The President announced the receipt of a remittance of Rs. 8,750 from the Government of the Strait Settlements, being contribution for

the purpose of defraying the cost of publication of Sir George King's *Materials for a Flora of the Malayan Peninsula*.

Mr. F. Finn read an obituary notice of the late Mr. L. de Nicéville.

By the death of Charles Lionel Augustus de Nicéville, Entomologist to the Government of India the world of science loses a brilliant and successful worker. He was born in 1852, and came of a noble Huguenot family long domiciled in England, and was the last baron of his line. His father was a member of the medical profession. He was educated at St. John's College at Hurst Pier Point, near Brighton, and gave early evidence of entomological tastes, as a schoolfellow informs us that he spent all his spare time in studying insects instead of participating in the ordinary school games. After leaving school he was for some time employed in a bank, but came out to India, and held non-gazetted appointments from 1876, his last one being that of Clerk of the Calcutta Small Cause Court, in which employment he was well known for many years in Calcutta. His holidays and daily leisure he employed in the Study of Oriental butterflies, on which he was recognized as the greatest authority. His papers on this subject were over 50 in number, and were of the very greatest importance, as he was a naturalist of the all-round type, not only studying his specimens in the cabinet but collecting largely for himself, and devoting much attention to breeding. By this method he experimentally proved that in no less than four cases seasonal forms of the same butterfly had been wrongly separated as species, and by applying this knowledge was able greatly to elucidate the history of their forms. He described many new species of butterflies and contributed much to our knowledge of the distribution of these insects, travelling in the course of his entomological researches far and wide in the east, from Ladakh to Japan and Sumatra. His researches were carried on for many years in a room allotted to him in the Indian Museum, where he kept his very fine and extensive collection, which has lately been acquired by purchase by that institution. It was his custom to daily resort to the museum for two or three hour's study before breakfast, and thus he was able to get through a great amount of work during the many years in which he pursued his studies.

His results were published in several scientific Journals, especially in those of the Asiatic Society of Bengal, and of the Bombay Natural History Society. Of both of these he was a member, in the latter case an honorary corresponding one, and he served them loyally and well. More than once he officiated as Natural History Secretary to the Asiatic Society, and once as the Secretary for Anthropology, and from his long

connection with the Society, dating from 1881, he was a living repository of its observances and traditions. To the Bombay Society he was of the greatest assistance, as he long undertook the task of correcting the proofs of their Journal, at which he was most painstaking and assiduous. The qualities of method and industry were, indeed, most characteristic of him, and make his published work of the very highest of value.

In addition to his connection with these Indian scientific societies, he was a member of the Linnean and the Entomological Societies, and in 1888 was elected a Corresponding Member of the Zoological Society, London, to whose Proceedings he also contributed.

His great work on the Butterflies of India, Ceylon and Burmah, was unfortunately never finished, but such portions of it as were published have been of the very greatest use. For three years from 1881 to 1884 he was put on special duty in the Indian Museum, whose exhibition collection of Butterflies he arranged, and at the beginning of the past year, to his great satisfaction, he was attached officially to that institution on the creation of the post of Government Entomologist. He attacked the work of economic entomology with his wonted energy, and in the pursuit of his studies in the Darjeeling Terai contracted the fatal attack of fever and pneumonia which caused his untimely death.

This has come as a terrible blow to his numerous friends, for his singularly kind and genial disposition had endeared him to all.

With a wide capacity for enjoyment he combined singularly simple tastes, and both in this and in his equanimity of temper and cheerfulness of mind showed himself a true philosopher. While he also realized in the fullest degree Chaucer's noble definition of the true gentleman as one who is always courteous and ever on the alert to do a kindness whenever he can. He leaves but one child, a daughter, and the heartfelt sympathy of all who knew and loved him in the east and at home will be with this young lady and her relatives in this sad bereavement.

List of Scientific Papers by LIONEL DE NICÉVILLE, F.E.S., C.M.Z.S.

Some new species of Rhopalocerous Lepidoptera from the Indian Region, Journ. As. Soc. Bengal, 1880, pt. 2, pp. 245-248 (in collaboration with Capt. G. H. L. Marshall, R.E.)

List of Diurnal Lepidoptera from Port Blair, Andamans, with descriptions of some new or little-known species and of a new species of *Hestia* from Burmah, Journ. As. Soc. Bengal, 1880, pt. 2 pp. 223-243, pl. XIII (in collaboration with Mr. J. Wood-Mason).

List of Butterflies taken in Sikkim in October, 1880, with notes on Habits, etc., Journ. As. Soc. Bengal, 1881, pt. 2, pp. 49-60.

- List of Diurnal Lepidoptera inhabiting the Nicobar Islands, Journ. As. Soc. Bengal, 1881, pt. 2, pp. 224-238 with a woodcut (in collaboration with Mr. J. Wood-Mason).
- Second List of Rhopalocerous Lepidoptera from Port Blair, Andaman Islands, with descriptions of and on, new and little-known species and varieties, Journ. As. Soc. Bengal, 1881, pt. 2, pp. 243-261, pl. XIV (in collaboration with Mr. J. Wood-Mason).
- Second List of Butterflies taken in Sikhim in October 1882, with notes on Habits, etc., Journ. As. Soc. Bengal, 1882, pt. 2, pp. 54-66.
- Second List of Diurnal Lepidoptera inhabiting the Nicobar Islands, Journ. As. Soc. Bengal, 1882, pt. 2, pp. 14-20, pl. III, and two woodcuts (in collaboration with Mr. J. Wood-Mason).
- On a new little-known Rhopalocera from the Indian Region, Journ. As. Soc. Bengal, 1883, pt. 2, pp. 65-91, pls. I, IX-X.
- Descriptions of a new species of the Rhopalocerous Genus *Cyrestes* from the great Nicobar Islands, Journ. As. Soc. Bengal, 1883, pt. 2, pp. 1-3, pl. I.
- List of Butterflies of Calcutta and its neighbourhood, with notes on Habits, Foodplants, etc., Journ. As. Soc. Bengal, 1885, pt. 2, pp. 39-54.
- Fourth List of Butterflies taken in Sikhim in October, 1884, with notes on Habits, Journ. As. Soc. Bengal, 1885, pt. 2, pp. 1-5.
- Descriptions of some new Indian Rhopalocera, Journ. As. Soc. Bengal, 1885, pt. 2, pp. 117-124, pl. II.
- On the Life-History of certain Calcutta species of *Satyrinæ*, with special reference to the Seasonal Dimorphism alleged to occur in them, Journ. As. Soc. Bengal, 1886, pt. 2, pp. 229-238, pl. XII.
- On some new Indian Butterflies, Journ. As. Soc. Bengal, 1886, pt. 2, pp. 249-256, pl. XI.
- List of the Lepidopterous insects collected in Cachar, Journ. As. Soc. Bengal, 1886, pt. 2, pp. 343-393, pls. XV-XXIII (in collaboration with Mr. J. Wood-Mason).
- List of the Lepidopterous insects collected in Tavoy and in Siam during 1884-85, by the Indian Museum Collector, under E. C. Pitman, Esq., C.I.E., Journ. As. Soc. Bengal, 1886, pt. 2, pp. 413-442, pl. XX (in collaboration with Mr. H. Elwes).
- Descriptions of some new and little-known Butterflies from India with some notes on the seasonal Dimorphism in the genus *Melanites*, P.Z.S., 1887, pp. 448-467, pls. XXXIX-XL.
- Description of a new Satyrid from India, P. As. Soc. Bengal, 1887, p. 147.

- Butterflies and Ants, Journ. Bombay Nat. Hist. Soc., 1888, vol. III, pp. 164-168, pls. XXVI-XXVII.
- On new and little-known Butterflies from the Indian Region, with a Revision of the genus of *Plesioneura* of Felder and of Authors, Journ. Bombay Nat. Hist. Soc., 1889, vol. IV, pp. 163-194.
- On new and little-known Butterflies from the Indian Region with descriptions of three new genera of *Hesperiidae*, Journ. Bombay Nat. Hist. Soc., 1890, vol. V, pp. 199-225, pls. D. E.
- Note on the Pupae of two Indian Butterflies of the subfamily Nemeobunae, P. As. Soc. Bengal, 1890, pp. 138-141.
- On new and little-known Butterflies from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1891, vol. VI, pp. 341-398, pls. F. J. G.
- On new and little-known Butterflies from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1892-93, vol. VII, pp. 322-356, pls. H, I, J.
- On new Sumatran Butterflies, Journ. Bombay Nat. Hist. Soc., 1892-93, vol. VII, pp. 555-557.
- On new or little-known Butterflies from the Indian Region, Journ. As. Soc. Bengal, 1892, pt. 2, pp. 273-293, pls. XIII-XIV.
- Note on the Indian Butterflies comprised in the subgenus *Pademna* of the genus *Euploea*, Journ. As. Soc. Bengal, 1892, pt. 2, pp. 237-245.
- Note on three Indian Butterflies, *Euthalia Nara*, *E. Sahadeva* and *E. Anyte*, P. As. Soc., 1892, pp. 144-146.
- On new and little-known Butterflies from North-East Sumatra collected by Hofrath Dr. L. Martin, Journ. Bombay Nat. Hist. Soc., 1893-94, vol. VIII, pp. 37-56, pls. K, L, M.
- On *Erities*, an Oriental genus of Satyrid Butterflies from the Indo-Malayan region, Journ. As. Soc. Bengal, 1894, pt. 2, pp. 1-58, pls. I-IV.
- On new and little-known Butterflies from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1894-95, vol. IX, pp. 259-321 and 366-410, pls. N, O, P, Q.
- A List of the Butterflies of Sumatra with special reference to the species occurring in the North-East of the Island, Journ. As. Soc. Bengal, 1895, pt. 2, pp. 357-555.
- On new and little-known Lepidoptera from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1895-97, vol. X, pp. 13-40 and 169-194, pls. R, S, T.
- Descriptions of the *Neptis prasilini*, Boisduval and some species allied to it, Journ. As. Soc. Bengal, 1897, pt. 2, pp. 533-541.
- A List of Butterflies of Mussoorie in the Western Himalayas and neighbouring regions, Journ. Bombay Nat. Hist. Soc., 1897-98, vol. XI,

pp. 205-221 and 368-389 and 585-605, pls. U, V, W (in collaboration with Mr. P. W. Mackinnon, F. E. S.)

On new and little-known Butterflies from the Indo- and Austro-Malayan Regions, Journ. As. Soc. Bengal, 1897, pt. 2, pp. 343-577, pls. I-IV.

A List of the Butterflies of Bali, Lombok, Sambawa and Sumba, Journ. As. Soc. Bengal, 1897, pt. 2, pp. 668-724 (in collaboration with Mr. H. J. Elwes).

On new and little-known Butterflies from the Indo-Malayan, Austro-Malayan, and Australian Regions, Journ. Bombay Nat. Hist. Soc., 1898, vol. XII, pp. 13-161, pls. X, Y, Z and AA.

On a small collection of Butterflies from Buru in the Moluccas, Journ. As. Soc. Bengal, 1898, pt. 2, pp. 308-321.

An Annotated List of the Butterflies of the Ké Isles, Journ. As. Soc. Bengal, 1898, pt. 2, pp. 251-283, pl. I (in collaboration with Messrs. Kühn and Heinrich).

Notes on some Butterflies from Tennasserim in Burmah, Journ. Bombay Nat. Hist. Soc., 1898, vol. XII, pp. 329-336, pl. BB.

Note on *Callinaga* and aberrant genus of Asiatic Butterflies, Journ. As. Soc. Bengal, 1900, pt. 2, pp. 150-155.

Note on the Avian genus *Harpactes*, Swainson, Journ. As. Soc. Bengal, 1900, pt. 2, Ap. 278.

The food-plants of the Butterflies of the Kanara District of the Bombay Presidency, with a Revision of the species of Butterflies there occurring, Journ. As. Soc. Bengal, 1900, pt. 2, pp. 187-278.

Note on the Butterflies comprised in the subgenus *Euploea*, Journ. As. Soc. Bengal, 1901, pt. 2, pp. 12-38.

On new and little-known Lepidoptera from the Oriental Region, Journ. Bombay Nat. Hist. Soc., 1901, vol. XIII, p. 157.

A list of Butterflies from Ceylon with notes on the various species, Journ. As. Soc. Bengal, 1899, pt. 2, pp. 170-233.

On Indian Pests. Rhopalocera, Ind. Mus. Notes, vol. I, pp. 9-14.

Notes regarding the *Delias Sanaca*, Moore, Tr. E. Soc., 1889, pp. 343-345.

The Butterflies of India, Burmah and Ceylon.

Vol. I, Calcutta, 1883, 8vo., pp. VII-94, pls. I-IX and woodcuts.

Vol. II, 1886, pp. 1-332, Calcutta and London, pls. XVIII-XXIV.

Vol. III, 1890, Calcutta, pp. XII-503, pls. XXV-XXIX.

Description of a new morphid Butterfly from North-Eastern India, Journ. Bombay Nat. Hist. Soc. V., p. 131, pl. C.

A Butterfly destructive to fruit, Ind. Mus. Notes, vol. I, pp. 193-194.

Note on the Indian and Malayan Peninsula Butterflies comprised in the subgenus of *Stictoploea* of the genus *Euploea*. P. Asiat. Soc. Bengal, 1892, pp. 153-161.

- Descriptions of two new species of Butterflies from Upper Burmah, Journ. Bombay Nat. Hist. Soc. X, p. 633.
- Description of a new Nymphaline Butterfly from Burmah, Ann. Nat. Hist. (6), XVII, p. 396.
- A Revision of the Pierine Butterflies of the genus *Dereas*, Ann. Nat. Hist. (7) II, pp. 479-484.
- On a new genus of Butterflies from Western China, allied to *Vanessa*, Journ. As. Soc. Bengal, 1899, pl. 2, p. 234.

The General Secretary exhibited two photographs of an ancient gun found under ground in the Goalpara District, forwarded by the Deputy Commissioner of Goalpara as a presentation to the Society.

The following papers were read :—

1. *History of Nepal and surrounding countries, compiled chiefly from MSS. lately discovered.*—By PROF. C. BENDALL, M.A. Communicated by the Philological Secretary.
 2. *Note on the Bābhans or Bheimhār Brāhmans.*—By MAHAMAHOPADHYAYA HARAPRASAD SHASTRI.
 3. *Historical criticism in the Muhammadan Schools.*—By CAPTAIN J. STEPHENSON, I.M.S.
 4. *Note on a find of copper coins in the Wun District, Berar.*—By CAPTAIN WOLSELEY HAIG, I.S.C.
 5. *An account of the late Maharaja Nubkissen Bahadur, drawn up for MR. A. STERLING, Persian Secretary to Government, on the 30th April, 1825, with an Introductory note by MR. S. C. HILL, and an appendix by MAHAMAHOPADHYAYA NILMANI MUKERJEE.*
 6. *On some cases of abrupt variation in Indian Birds.*—By F. FINN, B.A., F.Z.S.
 7. *Materials for a Flora of the Malayan Peninsula, No. XIII.*—By SIR GEORGE KING, K.C.I.E., LL.D., F.R.S.
 8. *Noviciæ Indiæ, No. XIX.—A new Indian Dendrobium.*—By MAJOR D. PRAIN, I.M.S.
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PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.

FOR APRIL, 1902.

The Monthly General Meeting of the Society was held on Wednesday, the 2nd April, 1902, at 9 P.M.

COL. T. H. HENDLEY, C.I.E., Vice-President, in the chair.

The following members were present:—

Major A. Alcock, F.R.S., Mr. J. Bathgate, Mr. F. Finn, Mr. D. Hooper, Babu Parmeshwar Lall, Rai Bahadur Ram Brahma Sanyal, Mahamahopadhyaya Haraprasad Shastri.

The minutes of the last meeting were read and confirmed.

Nine presentations were announced.

Captain Maddox, I.M.S., Babu Jaladhi Chunder Mukerjee, Mr. J. B. Fuller, C.I.E., Babu Raj Chunder Chunder, and Mr. H. Wheeler, were ballotted for and elected Ordinary Members.

It was announced that Mr. H. D. Carey and Mr. K. M. Chatterjee, had expressed a wish to withdraw from the Society.

The Secretary reported the death of Mr. V. R. Painsay, an Ordinary Member of the Society.

The Secretary read the names of the following gentlemen who had been appointed to serve on the various Committees for the present year.

Finance and Visiting Committee.

Dr. T. Bloch, Mr. F. Finn, Mr. E. A. Gait, Mr. J. D. Nimmo, Mr. F. E. Pargiter, Mr. H. H. Risley, Mahamahopadhyaya Haraprasad Shastri.

Library Committee.

Dr. T. Bloch, Mr. D. Hooper, Mr. C. W. McMinn, The Hon. Dr. Asutosh Mukerjee, Mr. F. Finn, Mahamahopadhyaya Haraprasad Shastri, Mr. E. Thornton.

Philological Committee.

Maulavi Ahmad, Dr. T. Bloch, Babu Pratap Chandra Ghosh, Shams-ul-Ulama Mahomed Shaikh Gilani, The Hon. Dr. Asutosh Mukerjee, Mr. F. E. Pargiter, Major D. O. Phillott, Pandit Satyavrata Samasrami, Mahamahopadhyaya Haraprasad Shastri, Mahamahopadhyaya Chandra Kanta Tarkalanker, Dr. G. Thibaut, Babu Nagendra Nath Vasu, Mr. A. Venis, Lt.-Col. L. A. Waddell, Dr. E. D. Ross.

Coin Committee.

Lt.-Col. D. S. E. Bain, Dr. T. Bloch, The Hon. Mr. J. A. Bourdillon, Babu Panchanan Mukerjee, Mr. F. E. Pargiter, Mr. E. Thurston, Mr. M. J. Seth.

The Secretary reported the presentation of one silver coin from the Honorary Secretary, Bombay Branch, Royal Asiatic Society, found in the Ahmedabad District.

Major Alcock in course of conversation referred to the desirability of having a photograph of Mr. E. Blyth prepared for the Society. It was suggested that it would be interesting to have portraits of other distinguished members. It was decided to ask the Council to consider the matter.

Mahamahopadhyaya Haraprasad Shastri exhibited a collection of copies of tattooed designs.

The following papers were read :—

1. *On specimens of two Mauritian Birds in the collection of the Asiatic Society.*—By F. FINN, B.A., F.Z.S.

2. *On hybrids between the guinea-fowl and common-fowl.*—By F. FINN, B.A., F.Z.S.

3. *Notes on animals kept in the Alipur Zoological Garden, No. 1.*—By RAI BAHADUR RAM BRAHMA SANYAL.

4. *On the origin of chess.*—By MAJOR H. G. RAVERTY. Communicated by the Philological Secretary.



PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR MAY, 1902,

The Monthly General Meeting of the Society was held on Wednesday, the 7th May, 1902, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present :—

Dr. T. Bloch, Rai Chunilal Bose Bahadur, Mr. I. H. Burkill, Major W. J. Buchanan, I.M.S., Dr. A. Caddy, Mr. W. K. Dods, Mr. F. Finn, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Kumar Rameshwar Maliah, Mr. H. H. Mann, Mr. R. D. Oldham, Captain L. Rogers, I.M.S., Dr. E. D. Ross, Rai Bahadur Ram Brahma Sanyal.

Visitors :—Mr. H. St. John Jackson, Mr. Macleod, Mr. R. W. Turnbull.

The minutes of the last meeting were read and confirmed.

Twenty-four presentations were announced.

Mr. A. Garrett, I.C.S., Babu Jogendra Nath Sen Vidyabhushan, M.A., Mr. E. W. J. Bartlett, and Mr. J. H. Marshall, were ballotted for and elected Ordinary Members.

The Council recommended the Revd. Mr. A. H. Francke, Moravian Missionary, Leh, Ladakh, proposed by Dr. T. Bloch, seconded by Mahamahopadhyaya Haraprasad Shastri, for election as an Associate Member at the next meeting.

The Revd. A. H. Francke, Moravian Missionary, Leh, Ladakh, who has been proposed for election as an Associate Member of the Society, has made himself known as a very good Tibetan scholar. A valuable publication of his, a Grammar of the Ladakhi dialect of Tibetan, has just appeared as Extra No. 2 to Journal, Part I, for 1891. Other papers by him, published partly in the Society's Journal, partly in other serials, deal principally with the language, popular literature and folklore of that part of Tibet, where he is stationed, and with which he is intimately acquainted. It is hoped that, becoming more closely connected with our Society, he will offer us for publication further results of those interesting researches, which he pursues with much ardour. He is not likely to become an Ordinary Member.

The General Secretary reported the death of Dr. Albrecht Weber, an Honorary Member of the Society.

The President announced :—

1. That Dr. T. Bloch having returned from tour, had taken over charge of the duties of Philological Secretary from Mahamahopadhyaya Haraprasad Shastri.

2. That Captain A. F. McArdle, I.M.S., had been appointed Treasurer in the place of Mr. W. K. Dods, resigned.

A cordial vote of thanks was proposed by the President to Mr. W. K. Dods for his services as the Treasurer of the Society, which was carried by acclamation.

The General Secretary read the following extract received from the Secretary to the Malda Mahomedan Association.

"Proposed by Munshi Shaikh Zamiruddin and seconded by Haji Ali Tanafza and carried unanimously that the tomb of the late Munshi Gholam Hossain, the author of *Reazus-Salatin*, which exists in a dilapidated condition in Mahulla Chouk Morbonali in this town of English Bazar be thoroughly repaired and enclosed with suitable railings and that the expenses be met from the funds of the Association."

The General Secretary reported the presentation of one gold coin found in the Poona District from the Honorary Secretary, Bombay Branch, Royal Asiatic Society.

The following papers were read :—

1. *A note on the Son Bhandar Cave near Rajgir.*—By DR. T. BLOCH.
(Abstract.)

In this paper I endeavour to determine the date and original destination of the Son Bhandar or 'Gold Treasury' Cave near Rajgir. It

consists of two artificial rock-excavations at the south-eastern foot of the Baibhar Hill, near Rajgir, in District Patna. One of those is now in a dilapidated state. They are generally believed to have been made by Buddhists in the 2nd or 3rd century B.C. I think, however, that an inscription in the outside wall of one of them gives us a clue to their age and original inhabitants. It is a Sanskrit verse in the *Upajāti* metre, written in two lines, and saying that 'the excellent teacher, Muni Vairadeva, made two beautiful caves, which were renowned on account of Arhants, and which were suitable for ascetics in order to obtain Nirvana.' There can be no doubt that the two caves referred to are the very ones, where the record is found, and as the writing belongs to the 3rd century A.D., we are constrained to put down their age to that period. But the inscription, moreover, shows that they were occupied not by Buddhists, but by Jains. The reference to the Arhants and the title *muni* borne by Vairadeva, instead of the Buddhist title *bhikṣu* or *śākyabhikṣu*, both point to this, and I think the name *Vairadeva* may be added as an additional proof of the same kind. *Vaira*, I take as a corruption of *vajra*, which is very frequent in the Prakrit of the Jains, and which is met with as the name of a section of this order. There is further just below the inscription a carved figure, now mutilated, of a Jain *Tīrthāṅkara*, which corroborates the above assumption.

As the caves at the time of the visit of the Chinese pilgrims probably were inhabited by Jains, to whom they originally belonged, we need not try to identify them with any of the Buddhist sites mentioned by the pilgrims. They probably have been left unnoticed, as, for a similar reason, the caves in the Barabar and Nagarjuni Hills near Gaya. General Cunningham's attempt to identify them with the Saptaparṇa Cave, the traditional site of the first Buddhist Council, has never met with any approval.

2. *A contribution to the history of Western Bundelkhand.*—By CHAS. A. SILBERRAD, I.C.S.

3. *A new Inscription from Umga in the District of Gaya.*—By PARAMESHWAR DAYAL. Communicated by the Philological Secretary.
(Abstract.)

The Inscription, which is here published for the first time, is on a loose slab of stone lying on the top of the Gauri-Shankar Hill, one of the highest peaks of Umga group of hills in the southern part of the District of Gaya. It contains in its historical portion a list of twelve Rajas down to Bhairavendra. The same occurs also in another published inscription from Umga, but the present inscription helps to make

some additions and corrections to the other published list. The inscription then records the consecration by Bhairavendra of some images of Umā, Maheṣa and Gaṇeṣa, which may still be seen lying on the top of the hill close to the inscribed slab. It contains a date purporting to be Monday, the 12th tithi of the dark fortnight of Jyaiṣṭha, in the Vikrama year 1500. This date is somewhat puzzling. For, on calculating all the possible European equivalents, as I have done with the help of Professor Jacobi's Tables, I find that it corresponds to Monday, the 7th May, 1442 A.D., the year being the *current* Vikrama year beginning with Caitra, and the arrangement of the lunar fortnights being according to the scheme beginning with full-moon (*pūrṇimānta*). The existence of *current* Vikrama years in dates, however, being a matter of very great uncertainty, the calculation can not be considered satisfactory; but at present I see no other way out of the difficulty.

The author refers also to the tradition pointing to Bhairavendra as the builder of the great brick temple at Konch, 4 miles from Tikari, in District Gaya, and 25 miles from Umga. I think this tradition deserves very great credit, for the close resemblance in style between this temple and the many temples at Umga, which, as we know, were mostly erected by Bhairavendra, must strike even a casual observer. Generally, the Konch temple is put down to 700 A.D. But in my opinion the local tradition is far more to the point.

Finally, the author relates the traditional history of the successors of Bhairavendra. He died childless, and his widowed Queen adopted as her successor one Bhānu Singh, a Sisonḍhia Rajput from Udaipur, who happened to come to Umga on a pilgrimage to Gaya. He became the ancestor of the present Rajas of Deo. The sixth in descent from him, Atibal Singh, removed his capital from Umga to Deo, where the family still resides, the present Raja being a minor, his father having died in 1898.

4. *On an early Arabic MS., relating to famous horses.*—By Dr. E. D. Ross.

(Abstract.)

This manuscript belongs to the very valuable Khuda Bakhsh Collection at Bankipore. It comprises 23 folios of 13 lines each. The full title of the work is *Al-Ḥalba fī asmā'i 'l-khayli 'l-mashhūra fī l-Islām wa 'l-Jahiliyya*, i.e. "The Hippodrome. On the names of famous horses in the days of Islam and in the time of Ignorance." The list includes the names of 237 horses, among which eight belonged to the Prophet. In the case of horses of purely historical fame, reference is made either to the battle in which they were present or to the

Tradition by which they have become famous. In the case of horses who owe their fame to the poets, verses in which their names occur are quoted in full. In a few cases, the author apparently knowing nothing of the horse in question, or having lost his reference, merely mentions that the horse was "famous." In many instances we find genealogies of horses, which in some cases go back five or six generations. There have been many Arab writers on hippology and on the veterinary art, but I believe the present "Stud-Book" is among the older writers unique of its kind.

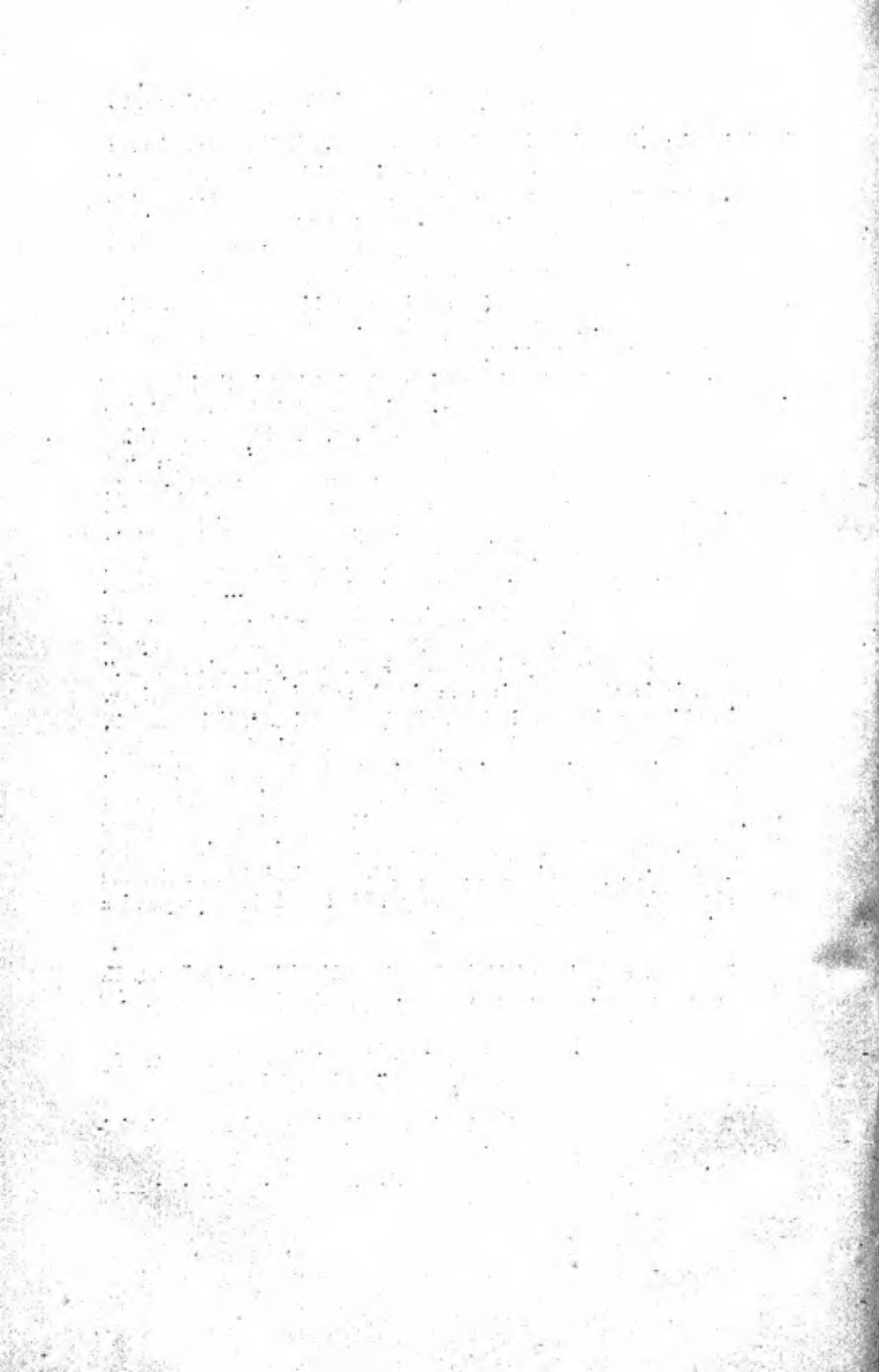
Our Asiatic Society's Library is sadly deficient in the important item of catalogues of manuscripts. On this account before committing the above statement to print I wrote to Mr. E. G. Ellis of the British Museum on the subject. He kindly sent me the following reply: "I can find nothing out about the *Kitab ul-Ḥalbah* of Muḥ. b. 'Alī b. Kāmil. A work of a similar nature was compiled for Dr. Perron by Muḥ. Ayyād 'al Tantawī. Dr. Perron published a translation of it in the first volume of his "*Le Nâcéri. La Perfection des Deux Arts, Traité complet d'Hippologie et d'Hippiatrie Arabes ... Traduit de l'Arabe d'Abou Bekr ibn Bedr*" 2 pt. Paris 1852—60. Al-Tantawī's treatise however contains a good many more names of horses than your MS. does. Unfortunately he does not name any of his sources." The MS. is in the author's own hand, and is probably unique. He gives his name in the colophon as Muḥammad ibn 'Alī ibn Kāmil, and says that he composed and wrote this work in A. H. 677 (A.D. 1278). The introduction contains a dedication to the vezir Abū 'I-Mu-fākhīr Muḥammad ibn Abū 'Abdu'llah Muḥammad ibn Abū 'I-Ḥasan 'Alī. I have unfortunately been unable to identify either the author or his patron. He quotes frequently from the following writers on the horse. Abū 'Ubayda, died A.H. 209. Al-'Asmā'ī, died A. H. 216, and Ibn al-'Arabī, died A.H. 543. I may add that I have prepared a transcript of the text for publication.

5. *On a collection of birds from the Chin Hills.*—By LIEUT. H. WOOD, R.E., and F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

6. *Notes on animals at the Alipur Zoological Garden, No. 2.*—By RAI BAHADUR RAM BRAHMA SANYAL, Superintendent of the Garden.

7. *Note on a disputed point in the life-history of Helopeltis theivora.*—By H. H. MANN, B.Sc.

8. *Some Anthropological notes on Calcutta Juvenile Criminals.*—By MAJOR W. J. BUCHANAN, I.M.S.



NOTICE.

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PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR JUNE, 1902,

The Monthly General Meeting of the Society was held on Wednesday, the 4th June, 1902, at 9-15 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present:—

Mr. J. Bathgate, Dr. T. Bloch, Major W. J. Buchanan, I.M.S., Mr. F. Finn, Mr. H. E. Kempthorne, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Kumar Rameshwar Malliah, Mr. H. H. Mann, Dr. E. D. Ross, Mahamahopadhyaya Haraprasad Shastri, Mr. E. Thornton, Mr. D. R. Wallace, Captain H. J. Walton, I.M.S., Pandit Jogendra Nath Vidyabhushan.

Visitors:—Babu Sarasi Lal Sarkar, Mr. H. Sudlow.

The minutes of the last meeting were read and confirmed.

Twelve presentations were announced.

Mr. A. A. Ghuznavi and Pandit Satis Chandra Acharya Vidyabhushan, were ballotted for and elected Ordinary Members.

The Revd. A. H. Francke was ballotted for and elected an Associate Member.

A vacancy having occurred owing to the death of Dr. Albrecht Weber, the Council recommended Monsieur R. Zeiller for election as an Honorary Member at the next meeting, setting forth his qualifications as follows:—

Professor René Zeiller, Ingénieur en chef des Mines, Membre de l' Institut, is not only one of the leading palæontologists of Europe but has made a special study of the *glossopteris* flora of South Africa, South America, and of India, and was the first to establish the true character of *Vertebraria* as the rhizome of *glossopteris*.

It was announced that Mr. J. G. Lorimer had expressed a wish to withdraw from the Society.

The Secretary reported the death of Mr. E. E. Oliver, an Ordinary Member of the Society.

The President presented to Babu Sarasi Lal Sarkar the Elliott Gold Medal for his essay dealing with the properties of recurring radix fractions.

The President announced that he had received an invitation from the Director, Ecole Française d' Extrême-Orient, Saigon, to the Congrès International des Orientalistes at Hanoi in December 1902, and gave further particulars.

The Philological Secretary exhibited some drawings of the ruins at Gaur and Panduab, in the District of Maldah.

The following papers were read:—

1. *Three new inscriptions from Gaya.*—By DR. T. BLOCH.

(Abstract.)

Two of those inscriptions belong to the time of Nāyapāla, that is about 950 A.D. They mention Paritoṣa, Śādraka and Viśvarūpa, father, son and grandson, local chiefs of considerable independence, who are known to us already from two other Gaya inscriptions. They built a number of temples at Gaya. One of those two new inscriptions is now inside a small shrine in the compound of the Vishnupad Temple. It says that Viśvarūpa adorned Gaya by temples of Gadādhara and other deities. It is impossible to say to which temple it refers; it is certainly not the present temple of Gadādhara, which, as all other shrines at Gaya, is of much later date. Inside the modern Gadādhara temple exists a duplicate of this inscription, at least the 2nd and 3rd verses of both are identical. Unfortunately, the remaining portion of it is now covered by a statue of Vishnu, and the owner of the temple does not allow to remove it, in order to copy the whole inscription. As, however, it opens with an invocation to the Sun-God, we may conclude that it referred to the erection of a temple of that deity.

The second inscription, with which I am dealing in this paper, is near the Akṣaya-vaṭa or the eternal banyan tree. It mentions the erection by the same Viśvarūpa of a number of shrines, the names of which partly still survive around this locality. Among them is a shrine or image of the Lord of the banyan tree (*vaṭeśu*) at the eternal banyan tree (*akṣayavate*). The inscription is of importance for the local history of Gaya, as it proves the existence of several of the sacred *tirthas* at Gaya at a period, which is far anterior to the date of the present temples at those places.

The third inscription is close to the eternal banyan tree, at the shrine of Prapitāmabeśvara. It is a small record, written in bad Sanskrit prose, but it is interesting both on account of its date, as also for one other reason. The date is recorded as the Vikrama year 1299, the new-moon *tithi* of Jyaiṣṭha, a Thursday, when the Suratrāṇa Manjadīna was reigning. *Suratrāṇa* is the well-known Sanskrit corruption of *Sulṭān*, and *Manjadīna* stands for *Mu'izzu-d-dīn*, and can only refer to the Delhi Sulṭān Mu'izzuddīn Bahram Shāh, who was taken prisoner on the 10th May, 1272 A.D., and killed on the 19th following. Calculating all the six possible European equivalents of the Sanskrit date, I find that both the 1st May, 1242 A.D., and the 18th June, 1273 A.D., correspond, both being a Thursday, coupled with the new-moon *tithi* of Jyaiṣṭha. But, as Mu'izzuddīn is still referred to as the reigning king, only the first date is admissible, and the inscription thus was engraved only a few days before the death of Mu'izzuddīn.

The inscription may be technically called a *sākṣi-śrāvāṇa*, or invocation of witnesses. It is incumbent upon every pilgrim to Gaya, either at the end of each station or at the completion of the whole pilgrimage, to call several deities as witnesses that, by going through the prescribed rites, he has freed himself of the debts which he owes to his ancestors. In a similar manner, in this inscription, Kāmadeva, who seems to have come from the North-West, says: I have done Gaya. Witness thereof is Prapitāmaha. The temple of Prapitāmabeśvara, where the inscription is found, is at present the last stage to which the pilgrims go, and, as Kāmadeva has selected this particular spot for an invocation of this kind, which is incumbent upon the pilgrims at the completion of their tour, we may conclude, that in one important point at least the present ritual existed already some 650 years ago.

2. *On some variations in Snipe (with exhibition of specimens).*
—By F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

3. *Tombs on the Hab river in Sind and Southern Beluchistan.*—
By J. PH. VOGEL, PH.D.

(Abstract.)

This paper describes a number of Muhammadan tombs, which are found at various places in distances from 10 to 50 miles from Karachi, and which exhibit some peculiarities. Some of them consist of several oblong sarcophagi, raised one upon the other, and the dead corpses were deposited inside them, not buried below ground, as was usually the fashion all over India. This mode of burying the dead is called the *Shāmī* (or Syrian) fashion, as opposed to the *Rūmī* (or Turkish) fashion, the usual one in India. It is evidently an importation from the West, as it is said to exist also in Seistan and along the Mekran coast. Another peculiarity is the existence near these Muhammadan tombs of rude carvings of a man on horseback; he often is represented as wearing a bow or sword, and attended by other men on foot, wearing matchlock. Some tombs, evidently of females, have representations of female ornaments, instead of the figure of the horseman. The author compares those carvings with similar ones, which are very common in the Himalayan districts, where they are called *muhras*. They were set up by Rajputs after the death of their chief, whose effigy they are meant to show, and the author suggests that the existence of similar representations at the Muhammadan tombs in Sind may be due to the fact, that the Burfat tribe, to whom those tombs belonged, were of Rajput origin. From inscriptions on some of the tombs in the *Rūmī* fashion, we learn that they belong to the middle of the 18th century. The author is of opinion that the tombs of the *Shāmī* fashion may be older, as this mode of burial apparently had become superseded later on by the common Indian fashion, but he is not inclined to put them down to a much earlier age, say not further than 1550 A.D.

4. *On a pair of abnormal Deer Horns (with exhibition of specimen).*—By F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

5. *On Melanic specimens of the common Indian Squirrel (Sciurus palmarum).*—By RAI BAHADUR RAM BRAHMA SANYAL.

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR JULY AND AUGUST, 1902.

The Monthly General Meeting of the Society was held on Wednesday, the 2nd July, 1902, at 9-15 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present:—

Mr. J. Bathgate, Dr. T. Bloch, Major W. J. Buchanan, I.M.S., Mr. I. H. Burkill, Mr. F. Finn, Mr. H. H. Hayden, Mr. T. H. D. LaTouche, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Major F. P. Maynard, I.M.S., Mr. J. D. Nimmo, Dr. E. D. Ross, Mahamahopadhyaya Haraprasad Shastri, Pandit Satischandra Acharyya Vidya-bhushan, Mr. D. R. Wallace, Captain H. J. Walton, I.M.S.

Visitors:—Mr. J. R. Blackwood, Mrs. Maynard, Mr. G. Wallace.

The minutes of the last meeting were read and confirmed.

Eighteen presentations were announced.

Mr. L. F. Morshead, I.C.S., Mr. F. Doxey, Mr. H. M. Leake, Dr. Wm. Roy Macdonald, M.B., and Mr. J. Luke, were ballotted for and elected Ordinary Members.

Monsieur R. Zeiller was ballotted for and elected an Honorary Member.

It was announced that Lt.-Col. L. A. Waddell, I.M.S., had expressed a wish to withdraw from the Society.

The President announced that Dr. E. D. Ross had been appointed to officiate as the Philological Secretary of the Society during the absence of Dr. T. Bloch.

Dr. T. Bloch exhibited some copper coins of Aurangzebe.

The following papers were read:—

1. *General notes on variation in Birds, with exhibition of Specimens living and dead.*—By F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

2. *Notes on Mohammedan Inscriptions from Behar.*—By DR. T. BLOCH.



The Monthly General Meeting of the Society was held on Wednesday, the 6th August, 1902, at 9-15 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present :—

Mr. J. Bathgate, Rai Chunilal Bose Bahadur, Dr. A. Caddy, Mr. H. Doxey, The Revd. E. Francotte, S. J., Mr. H. H. Hayden, Mr. T. H. D. LaTouche, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Mr. W. C. Macpherson, Kumar Rameshwar Maliah, Mr. R. D. Oldham, Mr. W. Parsons, Dr. E. D. Ross, Pandit Yogesa Chandra Sastree, Dr. C. Schulden, Mahamahopadhyaya Haraprasad Shastri, Pandit Satis-chandra Acharyya Vidyabhushan, Captain H. J. Walton, I.M.S., Mr. H. Wheeler.

Visitors :—Babu Hiralal Sinha, Mr. T. H. Smith.

The minutes of the last meeting were read and confirmed.

Seventy-two presentations were announced.

Mr. H. W. Peal was balloted for and elected an Ordinary Member.

It was announced that Lt.-Col. G. M. Porter, R.E., had expressed a wish to withdraw from the Society.

The General Secretary reported the presentation of one gold and one silver coin found in the Ahmednagar District and Ahmedabad Collectorate, respectively, from the Honorary Secretary, Bombay Branch, Royal Asiatic Society.

Mahamahopadhyaya Haraprasad Shastri exhibited a picture of Prithvi Raj, the last Hindu King of Delhi, carrying away Samyukta from the Svayamvara, and also the picture of a Bengali Brahmana who planned the present city of Jeypore in Rajputana.

The following papers were read :—

1. *Some notes concerning the People of Mungeli Tahsil, Bilaspur District.*—By THE REV. E. M. GORDON. *Communicated by the Anthropological Secretary.*

(Abstract.)

This paper from its detailed nature does not tend itself to summarising. The first part deals with the separate castes, for instance, the

Chamārs, and the first and most numerous division of them, the Satnāmīs.

(1) These taboo many articles of food, *e.g.*, Masur-ki-dal because of its resemblance to blood. Among them are a select few, the Jahariyās, who will never sleep on a bed. Their stricter observances are now rapidly being disused.

(2) The Chuúgiyā Chāmārs are chiefly distinguished from the Satnāmīs by their indulgence in smoking and idolatry. They rear no poultry, goats, or pigs, will eat flesh of cattle that have died a natural death, and use intoxicants.

(3) The Kananjiyā Chāmārs have a better right to the name than the preceding classes, as they work in leather. They are dirty and drunken.

(4) The Alirwār Chāmārs, few in number, resemble the preceding.

The paper concludes with some notes on beliefs and practices common to various castes. Marriage by capture may still be traced. There is a peculiar relation between maternal uncle and nephew (Māmā and Bhācā), who for instance by being in the same house render it liable to damage by lightning. The killing of a cat outcasts the offender. It is reckoned lucky to give contemptuous names to children, unlucky to let them be seen freely when quite young.

Belief in Witchcraft, and the evil eye is very prevalent.

During cholera epidemics the people are reluctant to use the name of the disease, and carry iron about them as a prophylactic.

The winnowing pan is supposed to add weight to a conveyance in which it is placed, so in case of moving a household, this article is held in the hand of some one who goes on foot.

2. *On Tidal Periodicity in the Earthquakes of Assam.*—By R. D. OLDHAM, F.G.S.

3. *On the Authorship of Vidvanmoda-Tarangini.*—By MAHAMAHOPADHYAYA HARAPRASAD SHASTRI.

4. *An unknown Commentary on the Maqámát of Hariri.*—By DR. E. D. ROSS.

(Abstract.)

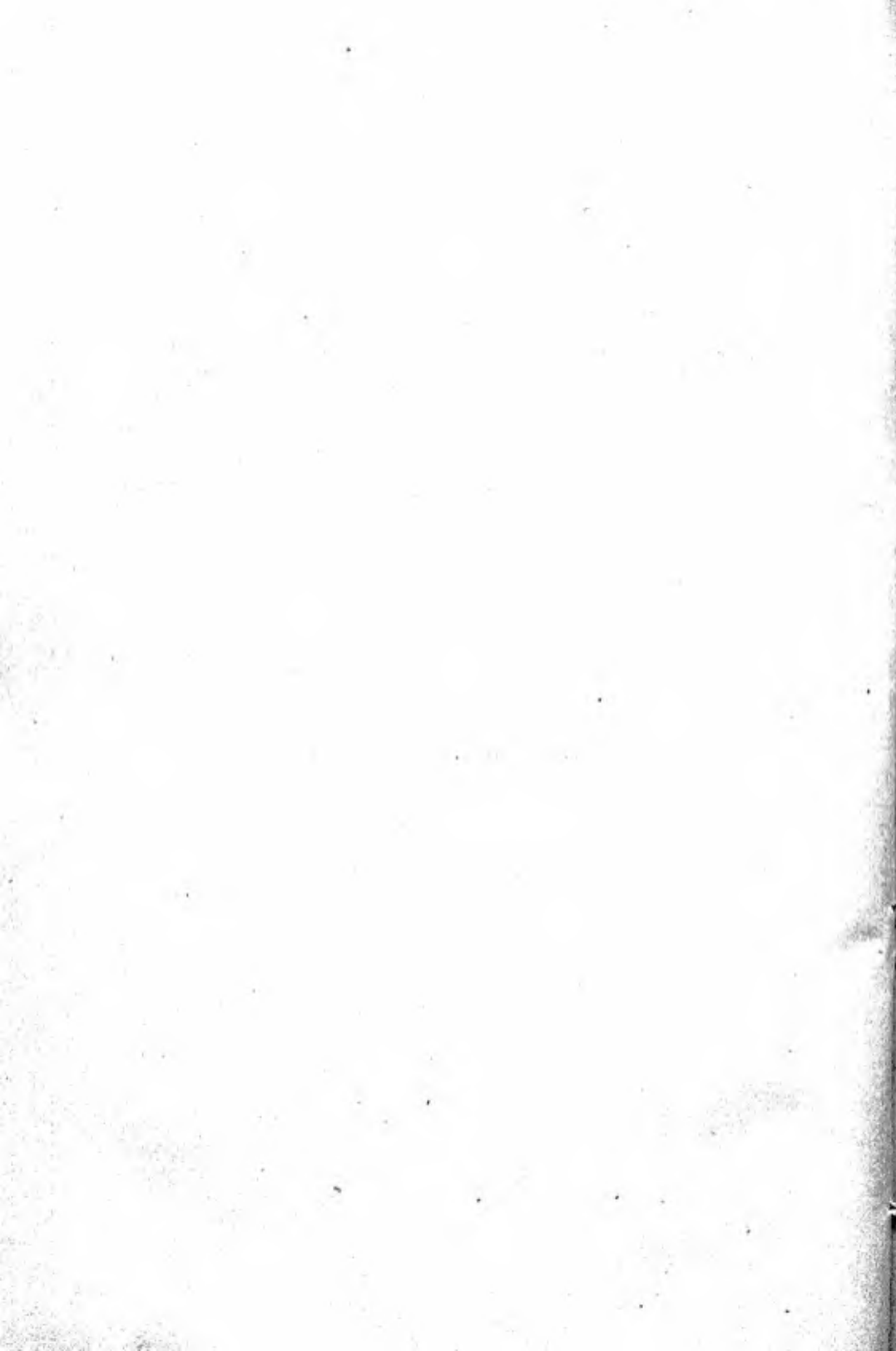
1. A new commentary on the Maqámát of Hariri.

The most famous commentaries on Hariri's difficult work are those of Mutarizí and Sherisí; there are many others known to scholars, but lately I came across one in the Khuda Bakhsh Library at Bankipore, which is quite unknown and to which a peculiar interest attaches. It is an autograph copy, and although the portion containing Maqámát 2

to 25 inclusive is missing, the first and last folios are fortunately intact. The commentary, like its fellows, is chiefly grammatical and the text of the Maqámát is not reproduced. The colophon tells us that it was composed in the year "A.H. 680 (A.D. 1281) by a certain 'Omar Ibn 'Othman Ibn 'Omar al-Baydháwí, and in the introduction we are told that he wrote it at the request of his brothers and uncles. It is not at all improbable that this man was the nephew of the famous Qoran commentator 'Abdullah Ibn 'Omar al-Baydháwí who died in A.H. 685 (A.D. 1286.) He may have been the son of 'Othman the brother of 'Abdullah, and thus the great commentator would have been among the "uncles" who encouraged his undertaking. I hope to publish in Part I. of the Journal the introduction, colophon and the commentary on one Maqámá as a specimen of the author's style.

5. *Biographical note on Khayr-ud-Din Mohammad the Historian.*—
By Dr. E. D. Ross.

In the forthcoming number of Part I. of the Journal Dr. Ross is giving a full account of this paper.



PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR NOVEMBER, 1902,

The Monthly General Meeting of the Society was held on Wednesday, the 5th November, 1902, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present :—

Mr. C. G. H. Allen, Mr. J. Bathgate, Mr. F. Doxey, Mr. D. Hooper, Babu Parmeshwar Lall, Mr. J. Macfarlane, Dr. C. Schulten, Mahamahopadhyaya Haraprasad Shastri, Babu Chandra Narain Singh, Pandit Satis Chandra Vidyabhusana, Mr. C. R. Wilson.

The minutes of the last meeting were read and confirmed.

Three hundred and forty-one presentations were announced.

Mr. A. Chaudhuri, Kumar Birendra Chandra Singh, Mr. A. H. Lewes and Mr. E. Vredenburg, were elected Ordinary Members during the recess, in accordance with Rule 7.

It was announced that Mr. C. L. Griesbach, Mr. R. P. Dewhurst, Major C. R. M. Green, I.M.S., and Mr. G. W. Place had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Captain A. F. McArdle, I.M.S., an Ordinary Member of the Society.

The General Secretary read a letter from Monsieur R. Zeiller, thanking the Society for being elected an Honorary Member.

The General Secretary reported that Mr. E. A. Gait and Pandit Satis Chandra Vidyabhushan had been appointed to serve on the Philological Committee of the Society during the present year.

The President announced that Mr. C. R. Wilson had been appointed Treasurer of the Society in the place of Captain A. F. McArdle, deceased.

With reference to a note by Mr. E. A. Gait, the Anthropological Secretary, relative to contributions to Part III of the Society's Journal, the President announced that the Council had approved of Mr. Gait's proposal to have short notes on Anthropological subjects published as a supplement to Part III of the Journal, and he had further authorised the addition of a similar supplement to other Parts of the Journal.

The General Secretary reported the presentation of the following coins :—

From the Superintendent, Government Museum, Madras, two copper coins.

From the Government of the United Provinces of Agra and Oudh, three silver coins.

The following papers were read :—

1. *Reynard the Fox in Ladakh.*—By THE REV. A. H. FRANCKE.

In the following I shall give all those tales of Reynard the Fox which I have collected in Ladakh, in out-line, simply to draw attention to the fact of their existence in a Tibetan-speaking country. The full Tibetan text with translation must be kept for a later publication. These tales seem to be proper folklore; for of the existence of a literary edition of such tales I have not yet heard. The different episodes were not told singly, nor at several occasions, but together, as if forming one story.

Although in this country I am unable to compare the Ladakhi tales with the immense literature which has been written on Reynard the Fox in various countries, I shall probably make no mistake in stating that they are comparatively near to the German tales. In both countries we have a king lion, and the bear and the wolf are both duped by the fox. The fox is asked to appear before the lion's court. He is willing to go, but on the way there he plays new tricks on his accusers. Besides that, the Ladakhi tale No. 8 is almost exactly the same as one of the German episodes of Reynard the Fox.

1.

The lion, the king, had invited the bear and the fox to eat a goat with him. He told them to go to the brook and to wash the intestines

of the goat. There the fox could not keep from eating half of the goat's stomach. The other half he gave the bear, saying: "In case the lion should ask who ate the stomach, you had better look to the ground, whilst I shall arrange for both of us!" When the lion asks who ate the stomach, the bear actually looks to the ground, whilst the fox points with his paw towards him. The lion takes the behaviour of the bear for shame and him for the trespasser, and kills him on the spot.

2.

Another goat is killed, and the fox is sent to the water to wash the stomach. He cannot help eating all of it. When back before the lion, he says that it was not his fault if the stomach was gone. "A lion came out of the water and took it. I had to hasten to get away!" The lion, the king, went to the water with the fox and saw his own image reflected in the water. This he took for the water-lion, jumped at him and was drowned.

3.

When the lion was dead, the fox got him out of the water, took off his skin and put it on himself. Then he goes to the lion's den and sits down on the throne. After some time the lion's wife, who had been out with the children, comes back and takes the fox for her husband, king lion. The fox sends the lioness into the hills to find some food for the family. When she is gone, the fox eats all her children, and runs away.

4.

Next he went to the wolf's den, where only the wolf's wife and children were present. He said he wished to speak to father wolf, and sent his wife to call him home. When she had left, he ate her children and fled away.

5.

When father wolf came home, he was furious and resolved at once to seek the fox and to revenge his children. After a long time he found the fox in a forest, where he was gathering resin. He asks if it was he, who had eaten his children. The fox pretends not to know of anything, as he had always been gathering resin. "What for?" "To make an ointment for the eyes. If this ointment is smeared on the eyes, you will be able to see the land of the gods (*lha yul*) as well as the land of the nāgas (*klu yul*)." The wolf wishes to try and loses his sight for two days. Finally he succeeds in scratching off the resin.

6.

Again the wolf goes to find the fox. He sees him on the top of a mountain plaiting a basket (*gundum*). He goes up and says: "Are you

not the one who gave me the ointment?" "No, that must have been somebody else. I have always been making baskets!" "What for?" "If you enter this basket, you will know at once where there is meat and butter!" The wolf is very hungry, wishes to try, and enters the basket. Then the fox kicks the basket, and it rolls down the hill.

7.

After some time the wolf sees the fox who is measuring sand with a bushel. "Did you not send me down from the top of the hill?" "Not that I know of. I have always been measuring sand!" "What for?" "I shall take it to the village, and there I shall exchange it for flour and butter!" The wolf who is hungry, wishes to go with the fox. He is allowed, if he will carry the bags. The fox ties the bags on the wolf's back, jumps on the top of them, and they start for the village. There the fox begins to cry: "*shangla wa shon!*" (The fox is riding on the wolf!) All people come armed with sticks. The fox runs away, and the wolf who cannot run on account of the heavy load, is beaten to death.

8.

[Another] wolf sees the fox standing in a pond with his tail in the water. "What are you doing that for?" "I am catching fish. If you will put in your tail until next morning, you will find that a great many fishes have bitten and seized your tail." The wolf goes in the water to try, and finds in the morning that his tail is frozen in the ice, for it was a cold night. Again he is caught and beaten.

9.

The wolf and the bear (probably relatives of the previous ones) go to the lion, the king (probably a new one), and complain on account of the impudence of the fox. The king tells them to bring the fox before him. The fox is quite ready to go. On the way to the king's court they see a Lama who is riding on a horse, with an umbrella over his head, a bag for food on his back, and shoes on his feet. The fox says: "If you like I will get you the Lama's umbrella!" "How could you?" "Wait a little and let me go in front of the Lama!" This he does and pretends to be limping. The Lama dismounts and tries to catch the fox. To be able to run better, the Lama puts the umbrella on the road and takes off his shoes and the bag. When the fox and the Lama are out of sight, the bear and the wolf carry away the umbrella, the bag, and the shoes. After this the fox, who had an easy escape, joins the bear and the wolf again. As his share in the booty he only asks for the food which is willingly given to him. The wolf receives the shoes, and the fox tells him that, with their help, he will be able to run much

quicker than he ever could before. The fox ties the strings of the shoes as tight as possible, and when they see a herd of goats, the wolf is sent for a trial. When the goat-herds see him, the wolf tries to run away, but cannot, on account of the shoes. He is killed by the goat-herds. Meanwhile the bear who was delighted to have received the umbrella, had gone home to his cave high up in the rocks. Unfortunately his children, who had never seen an umbrella, were frightened by their father, ran out of the cave and fell down the precipice. The mother who tried to hold them by their tails, fell down behind them, and the father bear who wished to hold his wife, tumbled down behind her. Then nobody was left to bring the fox before the king.

10.

The fox had stolen a calf and had tied it up near his house to graze there. He said: "When you see the wolf coming, you must cry, and I will come and deliver you!" Then he goes away to get some leather. After a short time he heard the calf crying and went there to deliver it. There was no wolf and the calf said: "I was crying only because I enjoyed the grass so much!" The wolf goes away and the same thing happens again. Then the fox becomes angry and resolves not to go to the calf again. Now the wolf actually comes and carries the calf away.

Notes.

To No. 8. It is remarkable that the obscene conclusion of the German version of this tale is apparently not known in Ladakh.

To. No. 10. This tale seems to be an alien element in the cycle of the fox-tales. It is not necessary to be a fox if one wishes to be wiser than a calf. This story seems to have been borrowed from an incident in the Rhea Sylvia-tales which were told in this Journal, *ante*, Part III, 1902, pp. 4-13.

2. *The Saraks of Orissa.*—By MAHAMAHOPADHYAYA HARAPRASAD SHASTRI.

3. *Some notes on the Rājvaṃṣī Caste.*—By MONMOHAN ROY, Deputy Magistrate, Rangpur. (Communicated by the Anthropological Secretary).

(Abstract.)

The terms Rājvaṃṣī and Koch have generally been assumed to apply to the same ethnic group, but the author of this paper gives good reasons for believing that they really include two communities of entirely different origin. When the Mongoloid Koches rose to power in the west of Assam, and the north of North Bengal, they gradually fell under the influence of Hinduism and began to assume the name Rājvaṃṣī which

was already the appellation of the great bulk of the admittedly Hindu population in their neighbourhood. The original Rājvaṃṣis were of Dravidian origin. Near the headquarters of the Koch rule the title Rājvaṃṣī was applied to all alike, and a considerable racial mixture took place. But further away the Koches did not so readily obtain recognition as Rājvaṃṣis and remained a distinct community. To this day, in most parts of Rangpur, Koches and Rājvaṃṣis may be seen living in the same village, but in all other respects quite distinct, and there is no intermarriage between them. There is a general consensus of opinion, amongst the persons consulted by the author of this paper, as to the marked difference in physical type between the two communities over the greater part of the Rangpur district. Further north, there has been a good deal of intermingling, but even there the two types can be clearly distinguished. The author goes on to point out other differences. The Koch worships Siva and Sakti while the true Rājvaṃṣī is a Vaishnava. The former drinks spirits and eats pork, but the latter usually abstains from both. The former shows traces of matriarchal polyandry but the latter does not.

The paper is an interesting one, and, if the theory advanced in it is accepted, we have at once an explanation of the great differences of opinion which have from time to time been expressed by different observers as to the physical affinities of these people. Some, whose opinion is entitled to the highest respect, have declared them to be Mongoloid, while others, equally competent, have held that they are of Dravidian origin.

4. *The Licchavi race of Ancient India.*—By SATIS CHANDRA VIDYĀBHŪṢAṆA, M.A., M.R.A.S.

(Abstract.)

The Licchavis, mentioned in the *Manu-saṃhitā* as *Vrātya-Kṣatriyas* but described by Sanang Setsen and Csoma as a branch of the Scythian race, came into India about the 8th century B.C. Samuel Beal thinks that the scene found at Sānchi probably refers to the stupa raised by the Licchavis over their share of the relics of Buddha. The appearance, etc., of the men shows that they were a branch of the race called Yue-chi (by Chinese writers) and allied to the people of Kuehe. They, as a confederate of eight republican clans, settled in Vaiçālī, corresponding to modern Basārḥ in the Muzaffarpur District. About 540 B.C., they were conquered by Ajāta-śatru, Emperor of Magadha. But afterwards they became very powerful in India, and about 471 B.C. Çiṇu-nāga, who was a member of their race, became installed in the kingdom of Magadha. According to the *Mahāvamśa*, the Çiṇunāga

dynasty ruled there for about one hundred years, but according to the *Viṣṇu-purāṇa* for 362 years. About 320 B.C. the celebrated Indian Emperor, Candra-Gupta, married a Licchavi girl, named Kumāradevī. That the Licchavis were then at least of equal rank and power with the early Guptas is shown by the pride in this alliance, manifested by the latter. The Licchavis, who were Buddhists, afterwards accepted Brāhmaṇism and became absorbed in the military caste about the 7th century A.D. when Hinduism revived in India.

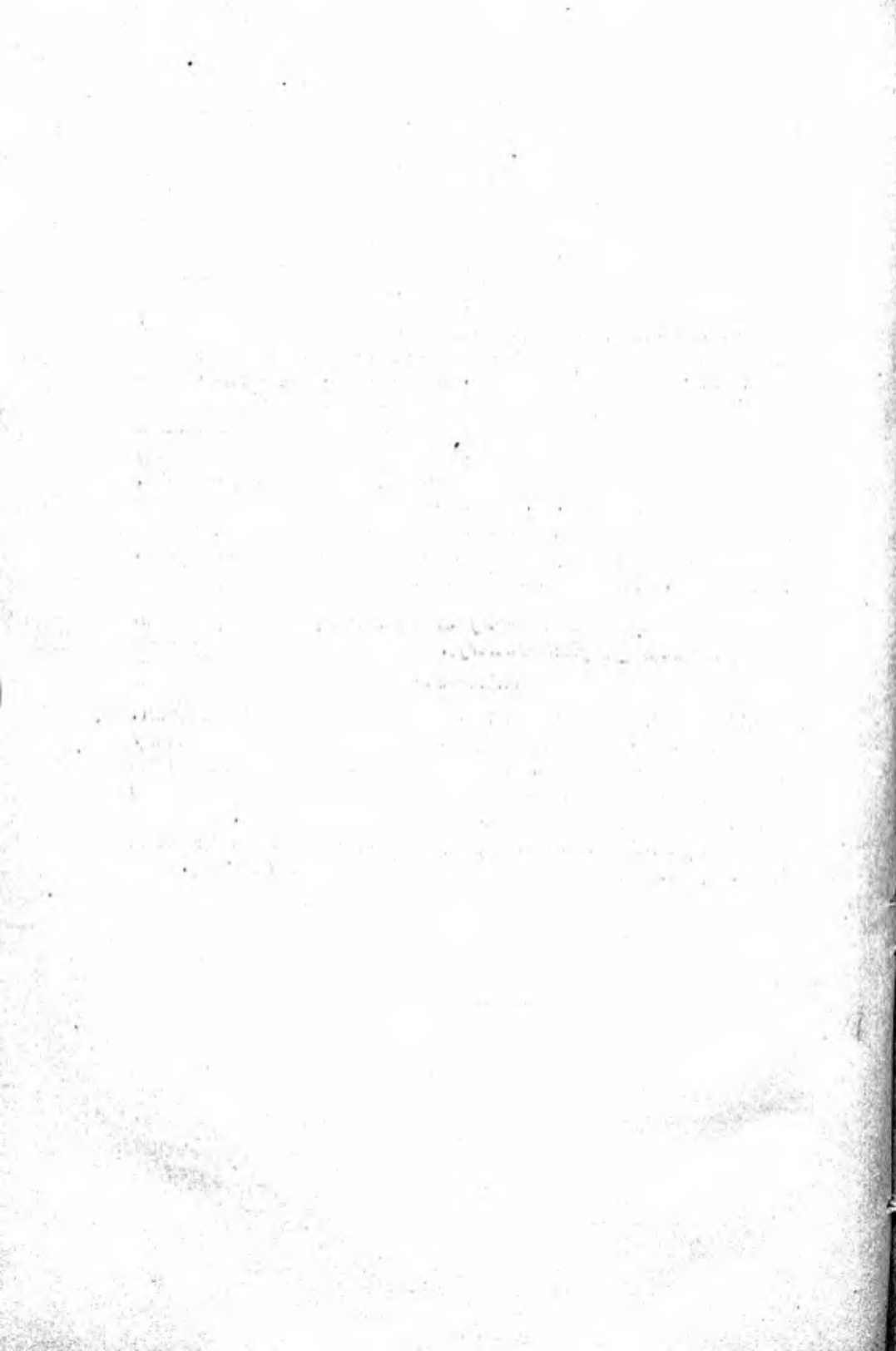
The kings of Nepal, Tibet, Ladak, and Mongolia too, trace their descent from the Licchavis. The Licchavi conquest of Nepal is assigned to Newarit, whose age is unknown. More than thirty kings of this race had reigned in Nepal before Jayadeva I. ruled there about 330-355 A.D. His successors were all Licchavis. Thus Amṇu-barma, who was a contemporary of Hwentsang and reigned in Nepal in 635-650 A.D., belonged to the Licchavi race. Na-khri-tsan-po, the first king of Tibet, was a member of this race. The 32nd in descent from him was Srang-tsan-gam-po who, about 627 A.D., married the daughter of Amṇu-varma the Licchavi king of Nepal. The rulers of Ladak and Mongolia do likewise claim descent from the Licchavis.

5. *Folklore of the Kolhān.*—By C. H. BOMPAS, I.C.S. (*Communicated by the Anthropological Secretary*).

(Abstract.)

This is an interesting collection of Ho folk-tales, gleaned by Mr. Bompas from the lips of the people themselves, while he was Deputy Commissioner of Singhbhum. The Hos, or Larka Kols, who inhabit the Kolhān in the west of that district, are closely connected with the Santāls of the Sonthal Parganas and the Mundās of Ranchi.

These primitive tribes are rapidly coming under the influence of Hinduism, and their traditions are fast fading from their memory.



PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL,
FOR DECEMBER, 1902.

The Monthly General Meeting of the Society was held on Wednesday, the 3rd December, 1902, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present:—

Mr. C. G. H. Allen, Mr. J. Bathgate, Major W. J. Buchanan, I.M.S., Mr. B. Chaudhuri, Mr. F. Doxey, Col. T. H. Hendley, C.I.E., Mr. J. Macfarlane, Mr. H. H. Risley, C.I.E., Captain L. Rogers, I.M.S., Mahamahopadhyaya Haraprasad Shastri, Dr. C. Schulten, Mr. A. Tocher, Pandit Satis Chandra Vidyabhusan, Mr. D. R. Wallace, Mr. H. Wheeler, Mr. C. R. Wilson, Mr. H. C. Woodman.

Visitor:—Babu Ganga Mohan Laskar.

The minutes of the last meeting were read and confirmed.

Twenty-two presentations were announced.

Pandit Harnarain Shastri Sahitya Bhushan was ballotted for and elected an Ordinary Member.

It was announced that Captain W. F. O'Connor, R.A., had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Sir John Woodburn, K.C.S.I., and Mr. John Cockburn, Ordinary Members of the Society.

The President announced that the Council at their last meeting passed the following Resolution :—

The Council received with profound sorrow the intimation of the death of their late President, Sir John Woodburn; and they offer their deep sympathy to Lady Woodburn and her family in their great bereavement.

In doing so, he addressed the meeting as follows :—

We have met to-night for the first time since the death of Sir John Woodburn, and you will, I am sure, desire that the occasion should not pass without an expression from me of the feeling with which the intimation of the sad event has been received by the members of the Society. We share in the sorrow which is felt throughout this Province and in the other Provinces where Sir John Woodburn served, and we mourn the loss of a member who took a deep interest in the work of our Society, and manifested his concern for its welfare by undertaking, at much inconvenience to himself, the duty of its President. In that, as in every other position which he was called to fill, he displayed the high qualities which won him the admiration and esteem of all classes. We had personal experience of the pleasure of association with him, and it was with no common regret that we saw the close of his tenure of office. We hoped to see him again among us, to read the paper which he then announced his intention of preparing on the work carried out by his Administration for the conservation of the valuable archaeological remains at Gour and Pandua in the district of Malda, but the realisation of that hope has sadly passed away. Of his connection with the Society more may be appropriately said in the next Presidential Address. I would now propose that we join the Council in the Resolution which they have passed by recording the following Resolution :—

The members of the Asiatic Society of Bengal assembled in monthly meeting desire to unite with the Council in expressing their sorrow at the lamented death of their late President, Sir John Woodburn, and in respectfully offering their sympathy to Lady Woodburn and her family.

The Resolution was adopted.

The President announced that owing to Mr. Finn's illness Captain Rogers, I.M.S., had been appointed to officiate as the Natural History Secretary of the Society.

The General Secretary reported that by order of Council, the Library will in future be open to the Members of the Society from 10 A.M. to 2 P.M. on Sundays.

Mahamahopadhyaya Haraprasad Shastri exhibited the image of a Buddha Chaturbhuja from Kanchananagar in Burdwan.

The following papers were read:—

1. *The Vṛātya and Saṅkara theories of Caste.*—By SATIS CHANDRA VIDYĀBHŪṢAṆA, M.A.

(Abstract.)

In the Hindu *ṣāstras* castes have been classified as (1) *Mūla* (original), (2) *Vṛātya* (fallen) and (3) *Saṅkara* (mixed). The *Mūla* or original castes are Brāhmaṇa, Kṣatriya, Vaiçya and Çādra, that is, the priest, warrior, trader and servant that are said to have sprung respectively from the mouth, arms, thighs and legs of Brahma the Supreme Being. Each of the four original castes had to observe certain religious rites enjoined on it by *Ṣāstras*. Those members of the first three castes who did not observe these rites, specially those who failed to invest themselves with the sacred thread at the proper time had to be degraded from their community. These negligent members were called *Vṛātya* or fallen. *Vṛātya* is thus defined to be a Brāhmaṇa, Kṣatriya or Vaiçya who has lost caste through non-observance of *Ṣāstrik* rites. This is the generally accepted signification of the word *Vṛātya*. My own view about the *Vṛātya* castes is, however, a little different. In the Vedic literature we find that the word *Vṛātya* bears a wide signification. There we find that all people whether natives of India or foreigners who were not within the pale of Brāhmaṇic civilization were also included among *Vṛātyas*. It is in this latter sense that the word has been very extensively used in our sacred literature. The Vedic religion did not spread over India in a single day. It required hundreds of years to penetrate into the distant corners of this vast continent. In the ancient literature we find minute descriptions of the sacrifices on the Sarasvatī and Dr̥ṣadvatī only. The region lying between these two rivers was called Brah̥māvarta corresponding to most parts of the Punjab. The Punjab was in fact the place wherein Brāhmaṇic civilization took root at a considerable antiquity. Most other places in India and outside were then inhabited by people who did not observe the Vedic rites. These people were called *Vṛātyas*. In the Vedas it has been said that in the beginning all were *Vṛātyas*. In the Tāṇḍya-pañcaviṃṣa Brāhmaṇa of the Sāma-Veda the Kauçitakis have been specially denoted as *Vṛātyas* and Yajūñavakir̥ṇa (unfit to sacrifice). No trace of the Kauçitaki people is now to be found in India. In the Ṣaḍviṃṣa Brāhmaṇa and Çrauta-sūtra of Lāṭyāyana the *Vṛātyas* are described as living in large number in the west of India. According to Dr. Weber these western *Vṛātyas*, who alone knew how to perform the *Syena* sacrifice, referred to the ancient Persians. In the 5th

book of the Atharva-veda we find that the Angas and Magadhas in the east and Gandharis, Mujvantas, Cūdras, Mahāvṛṣas and Vāhlikas in the north-west were known to the Hindus. Now Anga corresponds to modern Bhagalpur, Magadha to Behar, Gāndhāra to Peshwar, Vahlika to Balkh, etc.

The Manu-saṃhitā, too, affords us with a pretty long list of the Vrātya people. From among the Vrātya Brāhmaṇas included in the list of Manu I may mention only the Āvantya and Vāṭadhāna. The Āvantyas were the Brāhmaṇas of Avanti or modern Ujjain. The Vāṭadhāna is probably the same as Veṭhadina or Veṭhadipa mentioned in the celebrated canonical Pali work Mahāparinibbāna sutta (Chap. 6) and other Buddhist works. According to the description of the Pali works it may be asserted that Veṭhadipa was situated in the district of Shahabad. Avanti or Ujjain, which was a part of Malwa, was a head-quarters of Buddhism up to about 71 B.C., and the Brāhmaṇas of Veṭhadipa actually took a prominent part in preserving the relics of Buddha so early as in the year 543 B.C. It is therefore not altogether unreasonable to conjecture that the Brāhmaṇas called Āvantya and Vāṭadhāna were regarded as Vrātyas on account of their being devotees to Buddha and his religion.

Vrātya Kṣatriyas mentioned by Manu were the Jhalla, Malla, Nichihivi, Naṭa, Karaṇa, Khasa, Draviḍa, Pauṇḍraka, Auḍra, Kāmboja, Yavana, Ḍaka, Pārada, Pahlava, Cina, Kirāta and Darāda.

Of these the tribes called Jhalla, Naṭa, Karaṇa and Khasa still exist in various districts of Northern India occupying social positions inferior to those of the Rājaputs. The Mallas were a Buddhist people that lived in Pāvā and Kusināra in the district of Goruckpore. The Nichihivis (Licchavis) were also Buddhists. They lived in Vaiçālī corresponding to modern Basārh in the district of Muzaffarpore, and were very powerful in the 5th century B.C. The Draviḍas were the Dravidians of Southern India. Pauṇḍrakas were the people of Puṇḍravardhana corresponding to modern Dinājpur and Māldah in Northern Bengal. Auḍras were the people of Orissa. The Kāmbojas were the people that inhabited the Hindu Kush mountain which separates the Giljit valley from Balkh. The Yavanas were the Bactrian Greeks, and the Śakas were the same as the people of Sakai in Central Asia. Pārada and Pahlava were also two foreign tribes. Cinas were the people of China and the Darādas of Dardistan in the north-western frontier of Kashmir. The Kirātas were a flat-faced people that were very numerous in Sikkim, East Nepal and Tibet. The tribe called Kāruṣa mentioned in the Viṣṇupurāṇa has been described as Vrātya-vaiçya in the Manu-saṃhitā.

From the above it is evident that people of Persia, Balkh, Sakai,

Skythia, Sériké, China, Dardistan, Nepal, Sikkim, Behar, Orissa Northern Bengal, Southern India, Bhagalpur, etc., have all been called Vṛātyas or non-observers of Vedic rites.

In the first paragraph of this paper the distinction between a pure caste and a Vṛātya caste has already been indicated. It now remains to give a short account of the sacrifice by which a Vṛātya could be admitted into a pure caste. In the Tāṇḍya-pañcaviṃṣa Brāhmaṇa of the Sāma-veda this sacrifice called Vṛātya-stoma has been described at length. It is of various kinds, of which two may be mentioned here. The first called *Hina-vṛātya* was a sacrifice that was performed for the conversion of the unfranchised people, and the second called *Gara-gir* was that for the re-admission of the degraded ones. In the Lātyāyana Āraṇṣasūtra of the Sāma-veda, Chap. 8, Sect. 6, it is stated that a Vṛātya-stoma could be performed by a learned and pure Brāhmaṇa at the requisition of at least thirty-three Vṛātyas. When such a sacrifice was performed the Vṛātyas, having secured the rights and privileges of the twice-born castes, might afterwards learn the Vedas, perform sacrifices, receive presents and dine with Brāhmaṇas without being required to submit to penance. This is a very brief account of the Vṛātya theory.

In later Sanskrit works the word Vṛātya is very seldom found. The term that repeatedly occurs here is *Saṃkara*. According to tradition Saṃkara signifies those castes that are said to have been produced by a mixture of different castes. As the mixture can take place in innumerable ways the number of mixed castes is unlimited. Thus the four original castes by intermarriage can give rise to twelve mixed castes. These twelve by mixture among themselves and with the four original castes may produce hundreds of other castes. In this way the mixed castes may be multiplied infinite-fold. This is a very brief statement of the traditional theory. My own theory about the Saṃkara is quite different. In my opinion the Vṛātya people having entered the hierarchy of Brāhmaṇas were called Saṃkara. Those who did not follow the Vedic rituals in the beginning were designated as Vṛātyas and these afterwards having observed those rites and being admitted into the Brāhmaṇic society were called Saṃkara. Thus the Niṣāda described in the Lātyāyana Āraṇṣasūtra of the Sāma-veda as an aboriginal tribe has been mentioned in the Manu-saṃhitā as a mixed caste born of a Brāhmaṇa father and Ādva mother. The Ābhīras who, according to the Viṣṇu-purāṇa (Book IV, Chap. 24) conquered Magadha and reigned there for several hundred years, have been mentioned in the Manu-saṃhitā as a mixed caste born of a Brāhmaṇa father and Ambaṣṭha mother. The Karaṇa, Pauṇḍraka, Malla, etc., have been regarded by Manu as Vṛātya Kṣatriyas. But in later Sanskrit works they

have been described as mixed castes. Thus in the *Brahma-vaivarta Purāṇa* the *Karāṇa* is mentioned as having been born of a *Vaiçya* father and *Çūdra* mother, the *Paundraka* from a *Vaiçya* father and *Çuṇḍi* mother, and the *Malla* from a *Leṭa* father and *Tibara* mother. The *Kirāta* mentioned in the *Manu-saṁhitā* as *Vṛātya Kṣatriya* has been described in the *Ballāla Charita* as a mixed caste born from a *Vaiçya* father and *Brāhmaṇa* mother. The *Sarākas* returned in the Government Census as a Jain or Buddhist sect have been mentioned in the *Brahma-vaivarta Purāṇa* as a Hindu caste born of a *Jolā* father and Weaver mother. In reality *Saraks* were immigrants from *Serike* and *Sarogie* the same people as *Sorgae* that lived at the mouth of the *Indus*. The *Kols* who are evidently an aboriginal wild people of India have been designated in the same *Purāṇa* as a mixed caste born of a *Leṭa* father and *Tibara* mother. The *Kaivartas* who were perhaps the original inhabitants of Bengal have been described in the *Manu-saṁhitā* as a mixed caste born from a *Niṣāda* father and *Aogavi* mother, but in the *Purāṇas* as that born from a *Kṣatriya* father and *Vaiçya* mother. The *Andhra*, *Chola* and *Pāṇḍya* tribes of the *Dravidian* people became in course of time reckoned as pure *Kṣatriyas*. The *Tāmila* tribe of *Draviḍa* made several inroads into *Ceylon* and in the 5th century A.D. five *Tāmil* Kings successively reigned in the island. The *Tāmils* came towards the north too and the *Tāmbuli* caste of Bengal was perhaps formed by them.

From what we have found here it is evident that the traditional *Saṁkara* process of birth exists in mere theories, but does not correspond to actual facts. No caste ever came into existence in the way presupposed by the traditional theory. It is, however, undeniable that there are some rare instances of the father and mother being of different castes, but in those cases the children get the rank of either of the parents. In *Darjeeling* I met with several men of the *Chattri* caste whose father was *Brāhmaṇa*, but mother *Chattri*, but I never met with a single instance in which a *Brāhmaṇa* father and *Chattri* mother gave birth to a child that produced a third caste. Though the *Saṁkara* process of birth is an absolute myth it must be admitted that the theory of *Saṁkara* castes expounded in the *Brāhmaṇic Śāstras* is indeed very grand. The *Brāhmaṇic* legislators by tracing the original four castes from the different limbs of *Brahma* the Supreme Being and then deriving all other castes from a mixture of the four thoroughly established the unity and common footing of all the members of the Hindu society. All castes from *Brāhmaṇas* to *Caṇḍālas* are shown to be directly or indirectly connected with the Supreme Being and the gradations of honour existing among the members of different castes are also duly maintained. But it should be observed here that the *Vṛātya* theory was very much simpler,

for it assumed only four classes of people. The Vṛātya people having performed the Vṛātya-stoma could freely mix with members of the four pure and original castes on terms of equality.

2. *Four inscriptions of Mahāsiva Gupta and Mahābhava Gupta of Kalinga and Kosala.*—By MAHĀMAHOPĀDHYĀYA HARAPRASĀD SHĀSTRĪ, M.A.

Babu Rangalāl Banerji edited one set of three Charters of Mahābhava Gupta in the Ind. Ant., Vol. V, in 1876. He edited another set by Mahāsiva Gupta in Jour. Beng. As. Soc. in 1877. Babu Pratāp Chandra Ghosh edited another set in the same year in the same Journal. Dr. R. Mitra edited a fourth set of the Charters in 1882 in the same Journal again.

In the third volume of the Epi. Ind. Mr. Fleet re-edited these four chapters and edited two more which came into his possession.

I have got four new charters of these kings here. They belong to the same Mahābhava Gupta and Mahāsiva Gupta like their predecessors. The plates have been deciphered by Babu Ganga Mohan Laskar, M.A., Government Research Scholar, under my directions. But they afford very little new information. It is a wonder that with 10 inscriptions in our possession we do not yet precisely know who the kings were and where and when they reigned.

As pointed out by Mr. Fleet the Epigraphy belongs to a period subsequent to 1000 A.D., but I do not think very long after 1000 A.D.

The kings are said to have reigned over the countries of *Kosala*, which means Gondvana and Kālinga or Trikaṭinga, a very vague word meaning sometimes the whole coast from Madras to Bengal sometimes the Northern Sarkars and Countries including the Eastern Provinces of the Nizam.

Mr. Fleet says that their capital, sometimes called Vinētapura and sometimes Yayātinagara, on the Mahanadi is the modern Kataka. Babu M. M. Chakravartti doubts if this could be correct. That these two names apply to the same city there is no doubt, for a certain number of slokas have been applied to the descriptions of both and in both these descriptions the city is said to be on the Mahānadi.

The lately discovered Sena records speak both of Yayātinagara and of Vinētapura. The Pavaradūta written by a courtier of Lakshma-sena speaks of Yayātinagara and Ballāla Carita speaks of Vinētapura where the persecuted Banias found a refuge.

The villages granted with strange Dravidian names are extremely difficult to identify.

The plates will be properly edited in the Journal or in Epigraphia.

3. *The identification of Ramagiri, the starting-point of the cloud in the cloud-messenger of Kālidāsa with Ramagarha Hill in the Sugrujā State.*—By MAHĀMAHOPĀDHYĀYA HARAPRASĀD SHĀSTRĪ, M.A.

Rāmagiri, the starting-point of the cloud-messenger in Kālidāsa's well-known poem Meghadūta and the temporary residence for a year of the banished and love-sick Yaksha was identified by Horace Hayman Wilson in 1813 with Rāmatec, 28 miles north-east of Nāgapura. It is a place sacred to Rāma and it is in the neighbourhood of Sitabaldi the famous hill on which the British Residency was attacked by Appa Saheb in 1818. The first verse of the Meghadūta speaks of Rāma's hermitage with its waters sanctified with the ablutions of Sītā.

But when the south-east monsoon, which commences about the 19th June or about the beginning of the Bengali month of Aṣāḍhīa, began to blow it would carry the cloud towards Malwā, and not to Amarakantaka (ancient Amrakūta). So for a long time I doubted the correctness of Wilson's identification.

My readings, however, brought to my notice another Rāmagarha or Rāmagiri a few miles to the east of the Amrakūta. This Rāmagarha is also sacred to Rāma and there are pools, rills and brooks sanctified by the holy baths of Sītā. It is described in the 13th volume of Cunningham's Arch. Report as a single hill on a small plain with spurs and a peak. The small plain is surrounded on the north and towards north-east and north-west by high range of hills which a rain-cloud is not expected to cross over. So when the south-east monsoon strikes upon a piece of cloud resting on the spurs of Rāmagiri it will drive the cloud north-west. Obstructed there the cloud will veer round to the Amrakūta. So I thought Rāmagarha in the Sarguja State would be our Rāmagiri.

But an unexpected corroboration was afforded by a study of the works on Rāmagarha. It has two caves very ancient indeed, one is now called the Jogimārā cave, the other Sitābanjirā cave. These caves have inscriptions in Asoka characters. These have not yet been deciphered. Cunningham tried his hand at it, but could not do much. He was anxious to find in it some record of Devadatta, the cousin and opponent of Buddha. But I found two love-songs in these inscriptions.

The first song translated into English will run thus:—

I salute the beautifully-formed one who shows us the gods. I salute the beautiful form that leads us to the gods. He is much in quest at Vārāṇasī. I salute the god-given one for seeing his beautiful form.

The second song:—

The heart of a lady living at a distance (from her lover) is set

to flames by the following three:—Sadam Bagara and the poet. For her this cave is excavated. Let the god of love look to it.

Why and how and by whom the caves were excavated cannot now be determined but the existence of Asoka inscriptions show that the caves must be as old as the 2nd or 3rd century B.C. The love-songs must have inspired Kālidās with the idea of connecting them with one of his heroes and he has connected it with the story of the love-sick Yaksha in banishment.

4. *A study on the constitution of Dimercurammonium Salts.*—By P. C. Rāy, D.Sc.

5. *Dimercurammonium Nitrate, Part I.*—By P. C. Rāy, D.Sc.

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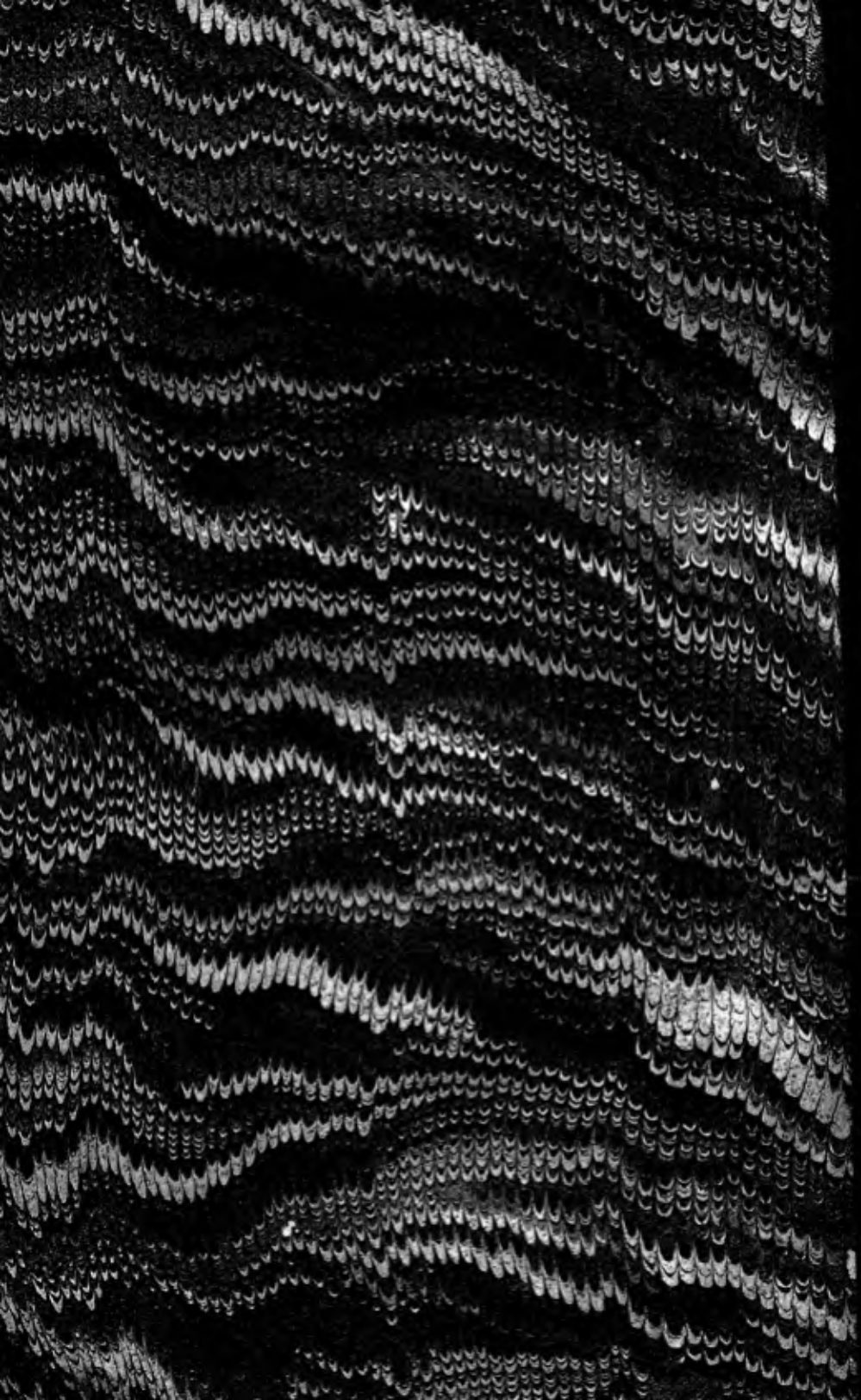
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